

Alcatraz Embarkation Site

Project Sponsors:

Golden Gate National Parks Conservancy

National Parks Service

Port of San Francisco





The Alcatraz Embarkation Site is located at the midpoint of a series of public spaces along the northern half of the Embarcadero. These Transition from urban (local) to destination (visitor) with the Alcatraz Embarkation Site at the midpoint potentially serving both groups.



fisherman's wharf



pier 39



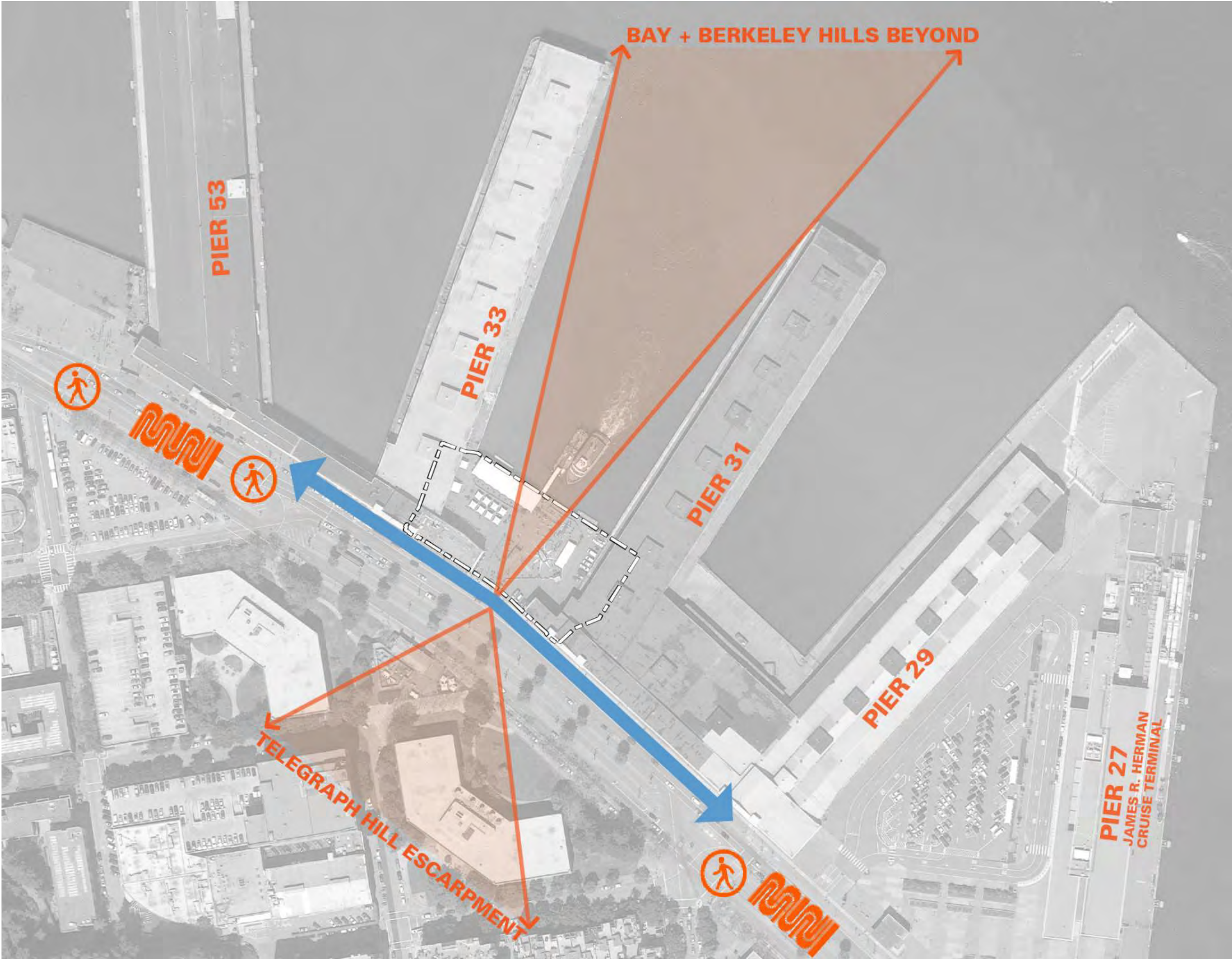
exploratorium



ferry building

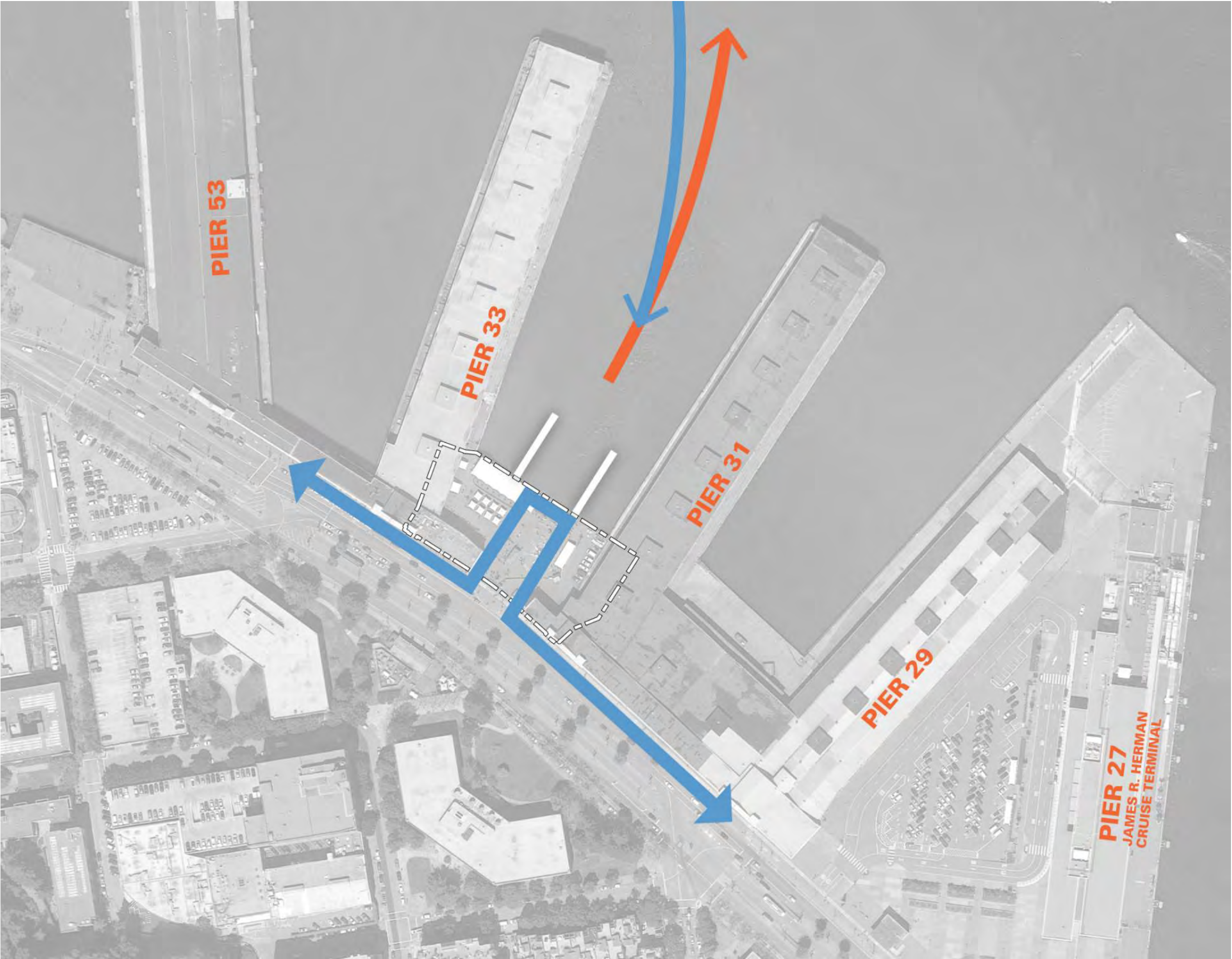
site analysis

This diagram shows the site (boundary outlined in white) and analysis of the immediate surroundings. Note that there is no crossing of the Embarcadero at the site, visitors will approach either from the east or west where the cross walks and muni stops and parking are located. The site has a diagonal orientation and the two main view corridors are delineated and the views shown below (note that Alcatraz is not visible from the site).



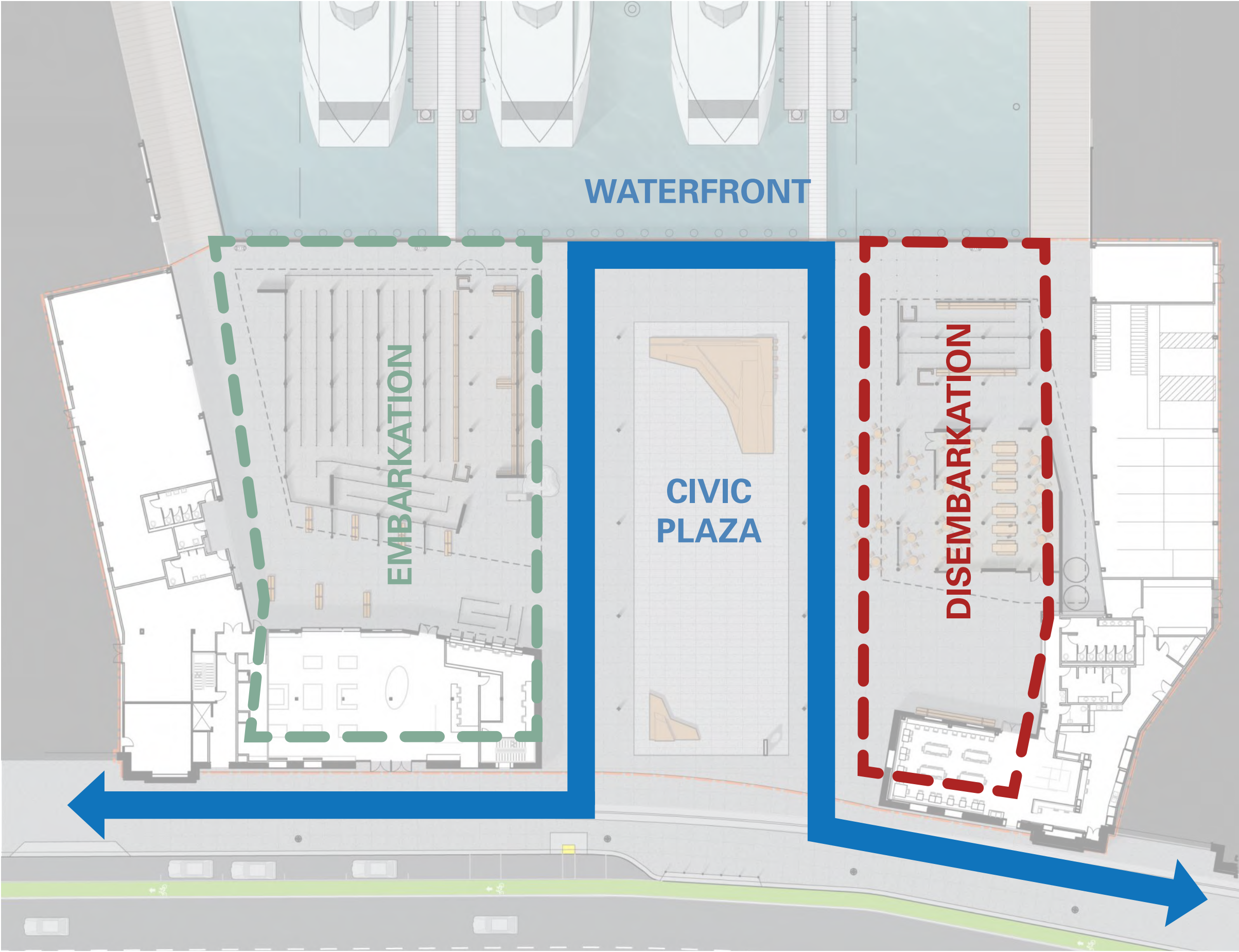
site concept

With the site being located at the midpoint of the transition from urban to destination, the pedestrian flow along the Embarcadero became a driving concept that organized the site's programing functions.



existing conditions





Three part division of site:

- 1. Civic Plaza
Brings the Embarcadero into the site.
- 2. Embarkation
Organizes ferry embarkation operations and provides framework for interpretive elements & experiences.
- 3. Disembarkation Tour & Cafe
Provides comfort, sustenance, and social connection to visitors and everyday locals alike.

existing site program analysis

Spatial analysis of the site was completed to clarify how the site is used by the current ferry operator and to inform the future organization of the site.

Three primary categories of programmatic use were identified: operational, amenity/interpretive, and open space. An additional significant portion of the site is taken up by parking for staff and accessible loading on the wharf area.

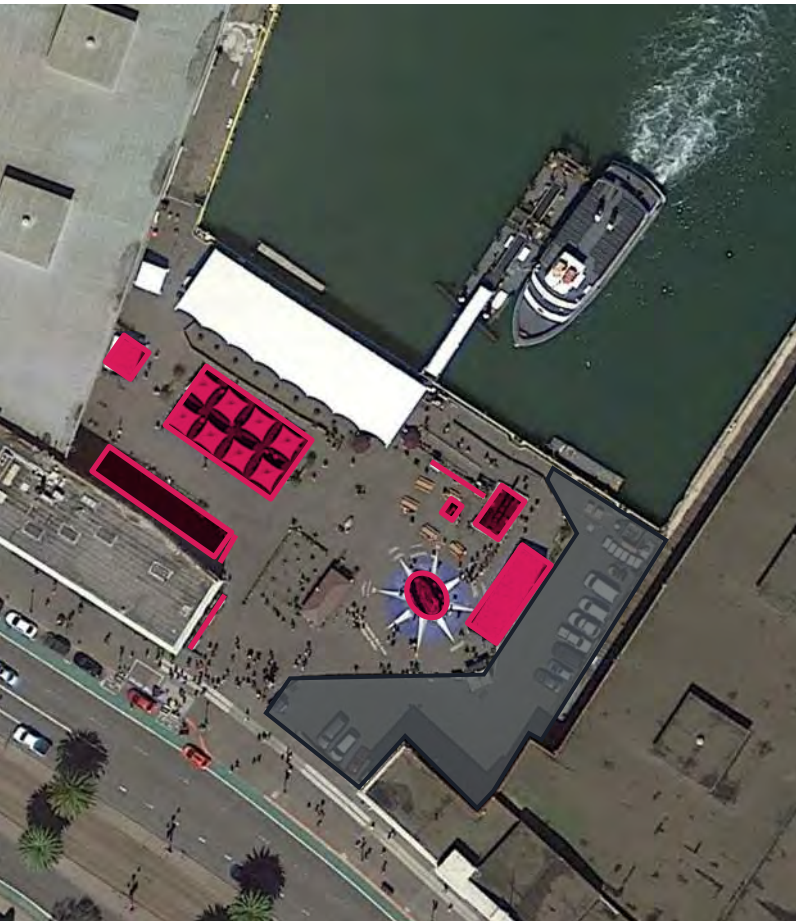
The active functional elements (operational and amenity/interpretive) are distributed across the site in a non-heirarchial fashion which results in orientation problems for visitors.

Additionally the mosiac of program areas breaks the open space up into a series of small spaces that are inadequate to contain the large quantities of visitors to the site.

Consolidating the existing program areas and removing the parking from the marginal wharf shows that there is ample room to accommodate the distributed site elements into continuous functional zones on the site.



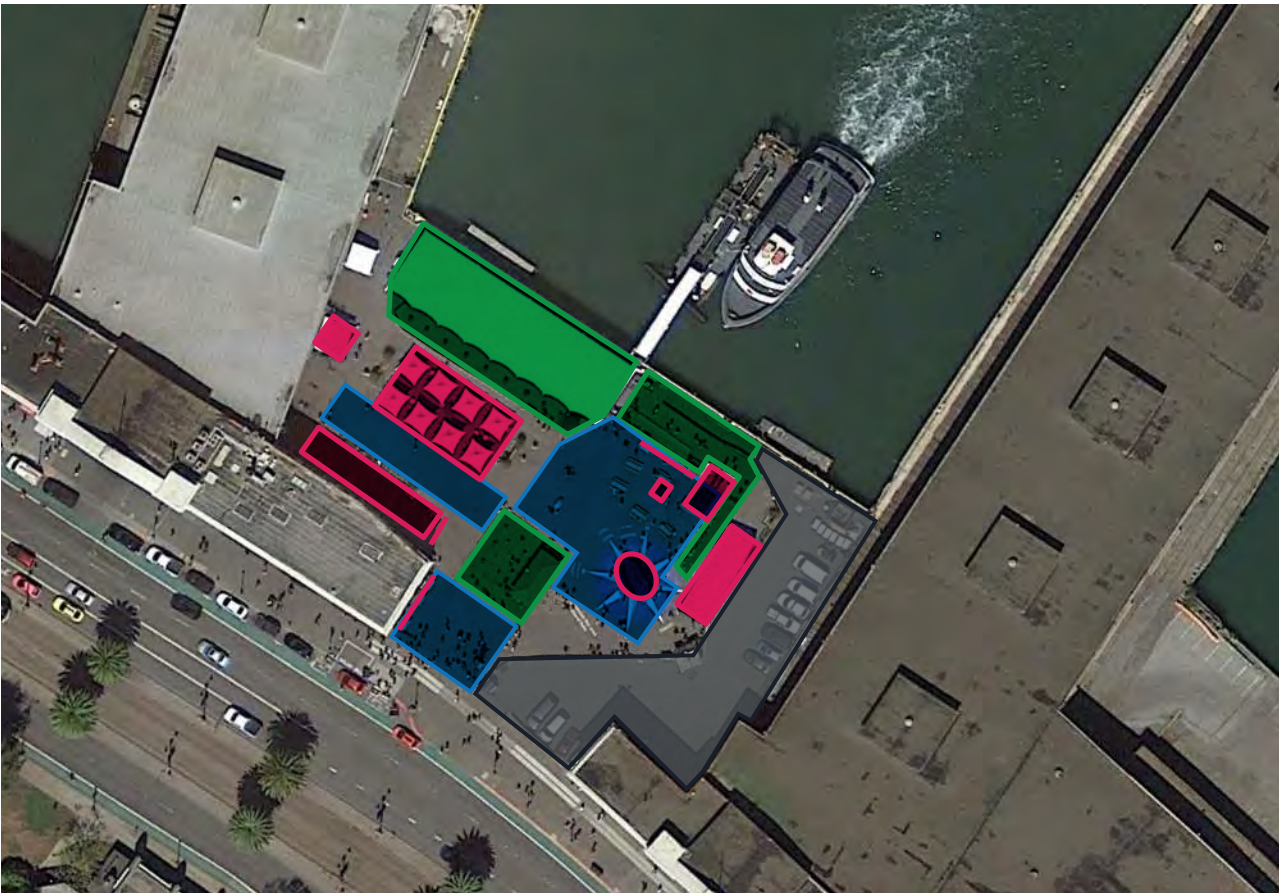
existing operational program areas



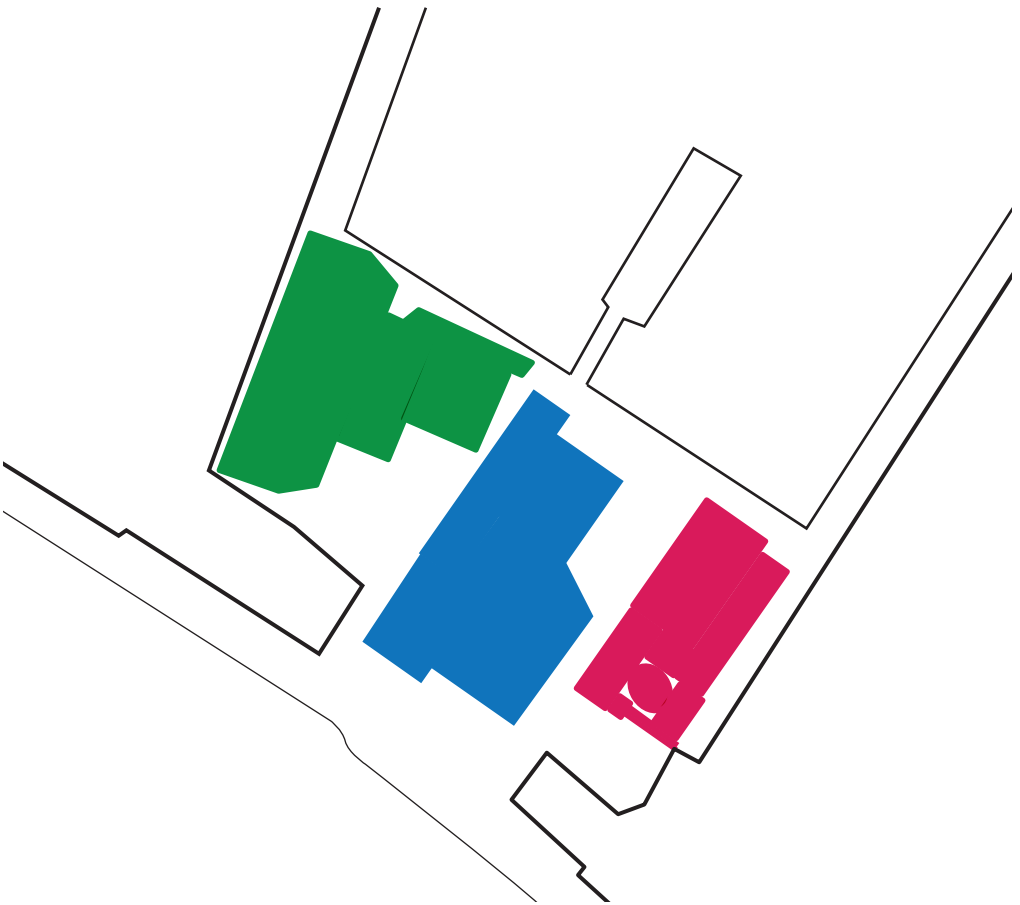
existing amenity & interpretive program areas



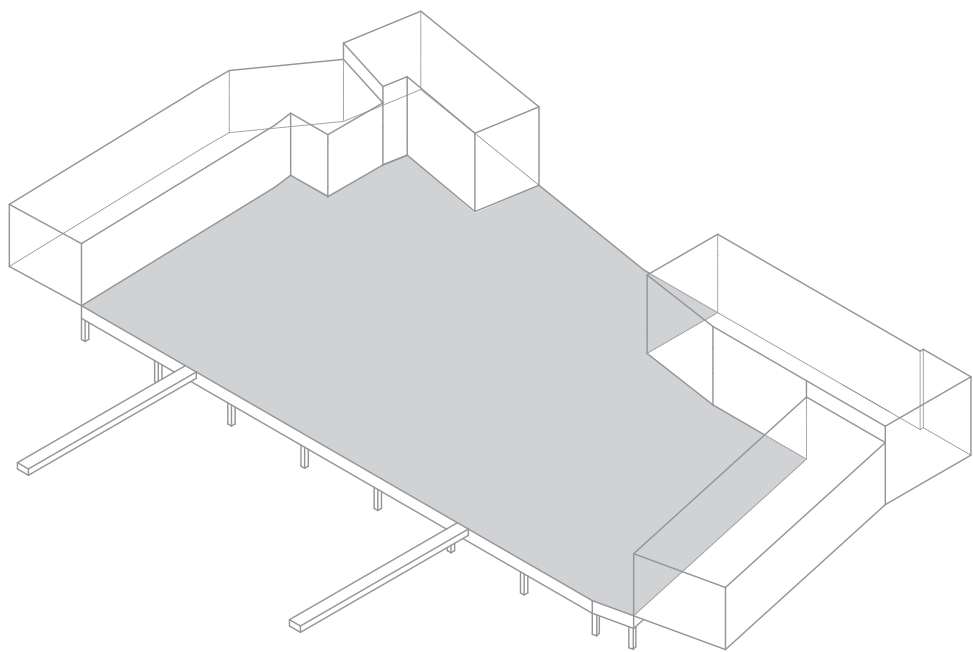
existing open space areas



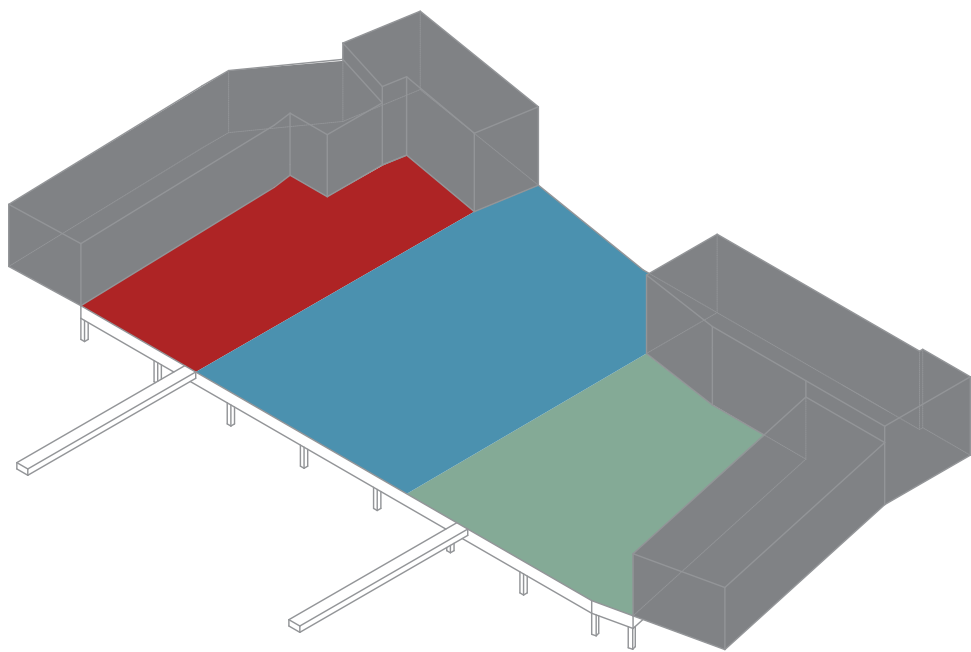
existing site program use



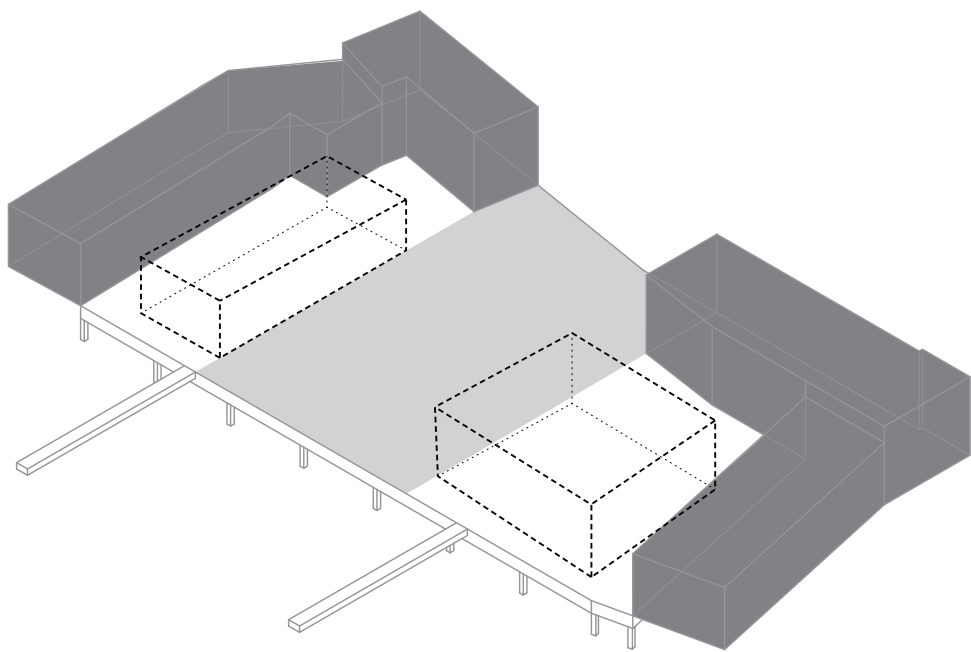
consolidated existing site program



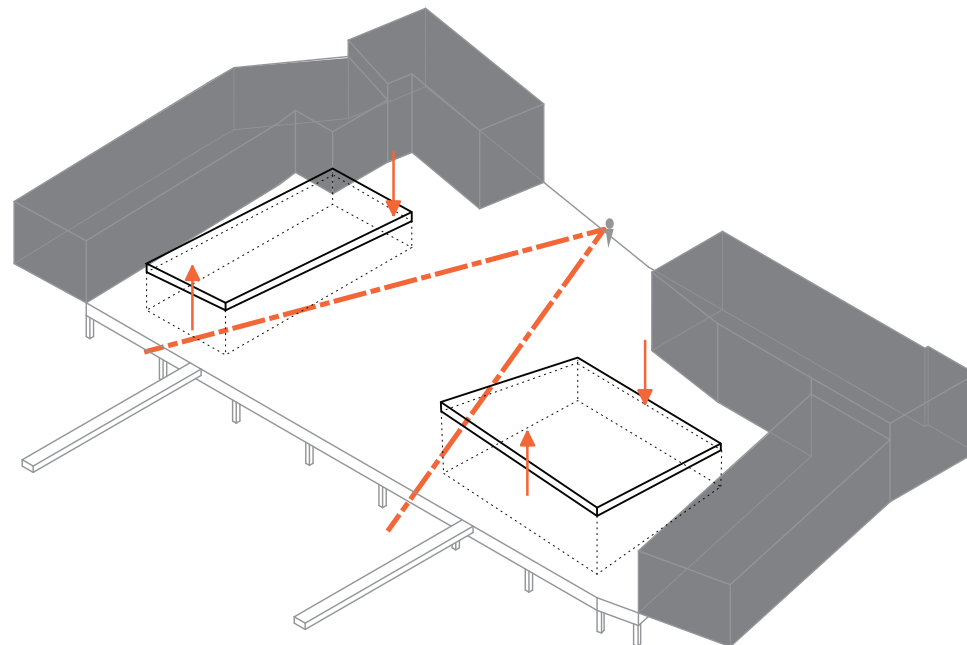
existing undifferentiated space



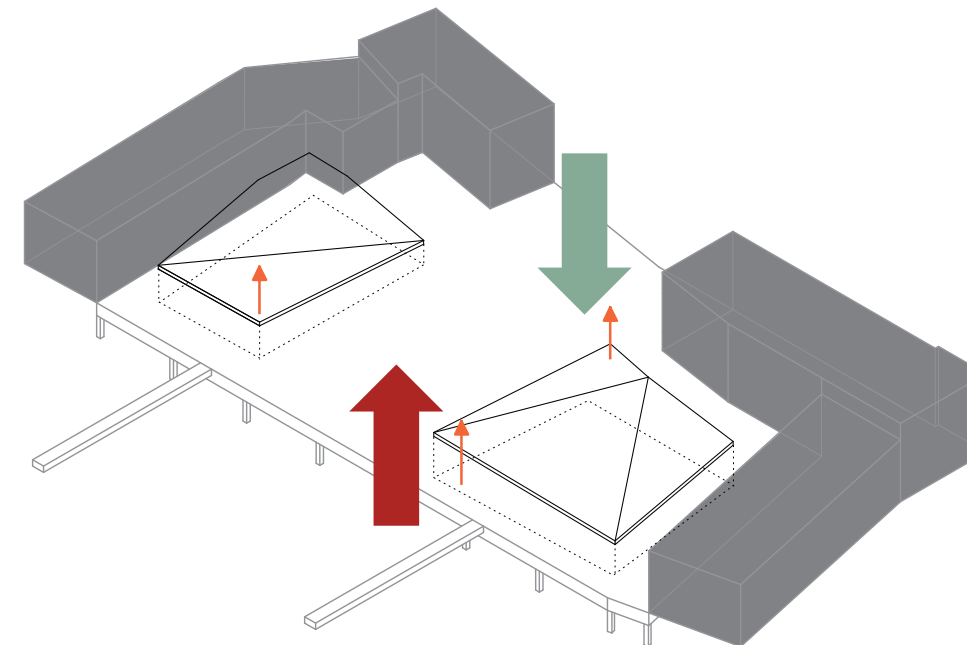
divide site functions, create orientation hierarchy, bring public space of embarcadero to the waterfront



frame and provide scale for civic space, provide organizing framework for function and infrastructure

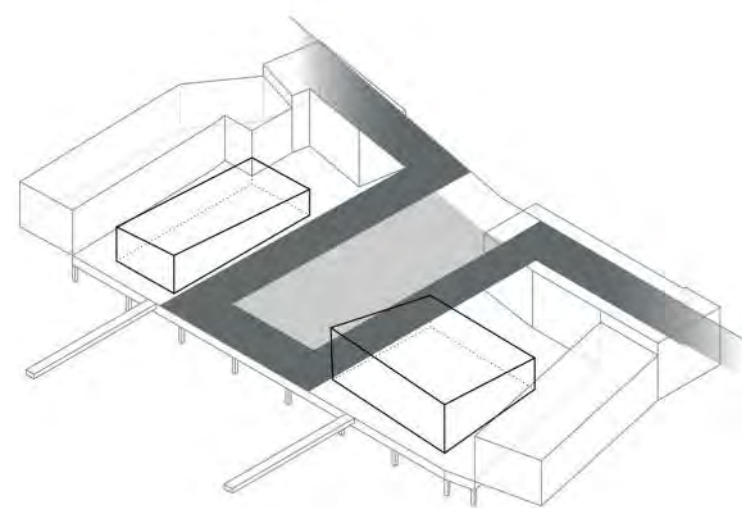


roof planes angle up to frame view at waterside while remaining below historic bulkhead at shore side



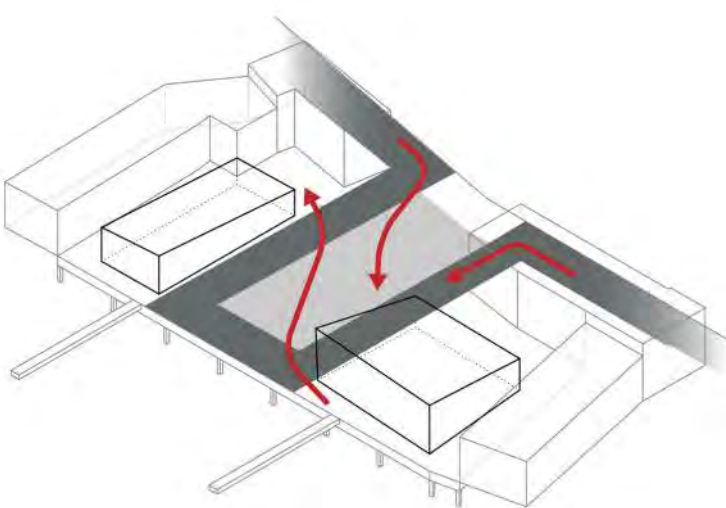
roof planes fold to address visitors arriving on embarkation side and visitors disembarking from the boat on the apres tour side.

site concept development



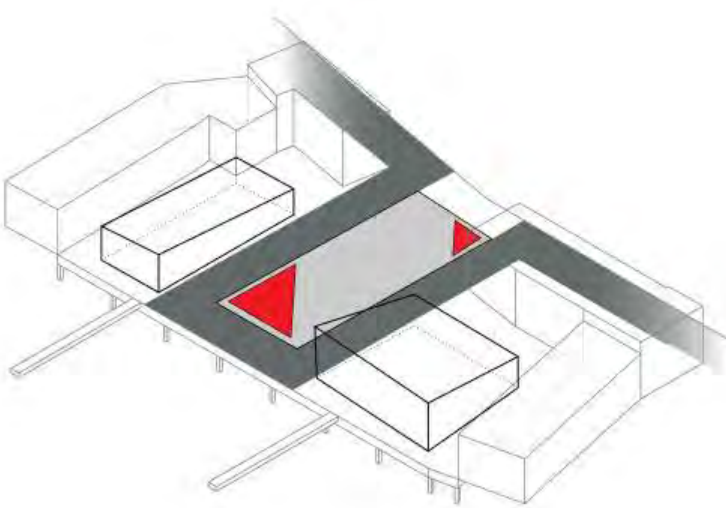
site organization

The plaza is organized by drawing the character, scale, and materials of the embarcadero promenade into the site. This element defines the perimeter of the central plaza. The plaza area is demarcated by a material contrast using light toned cast in place concrete with finer grain paving scores.



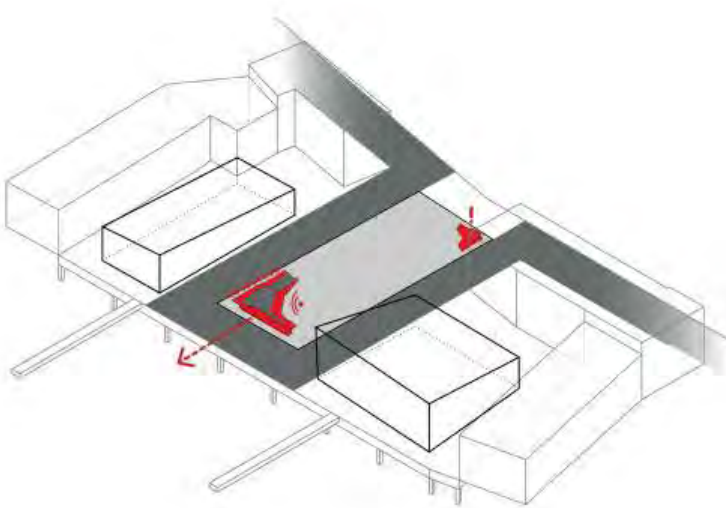
visitor flow

The form of elements within the plaza are designed to respect and reinforce the flow of visitors entering the site and disembarking from the ferry.



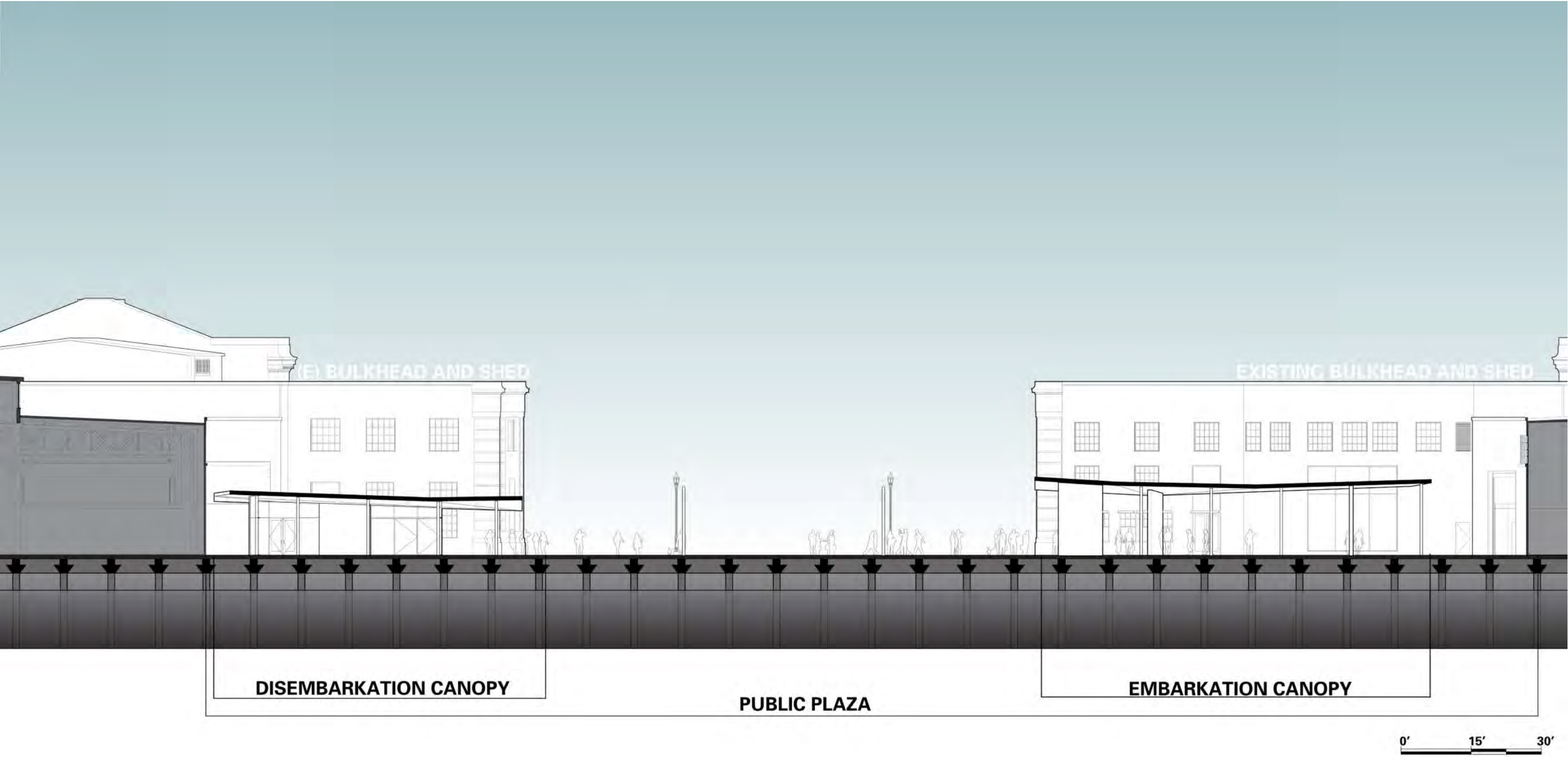
landing concept

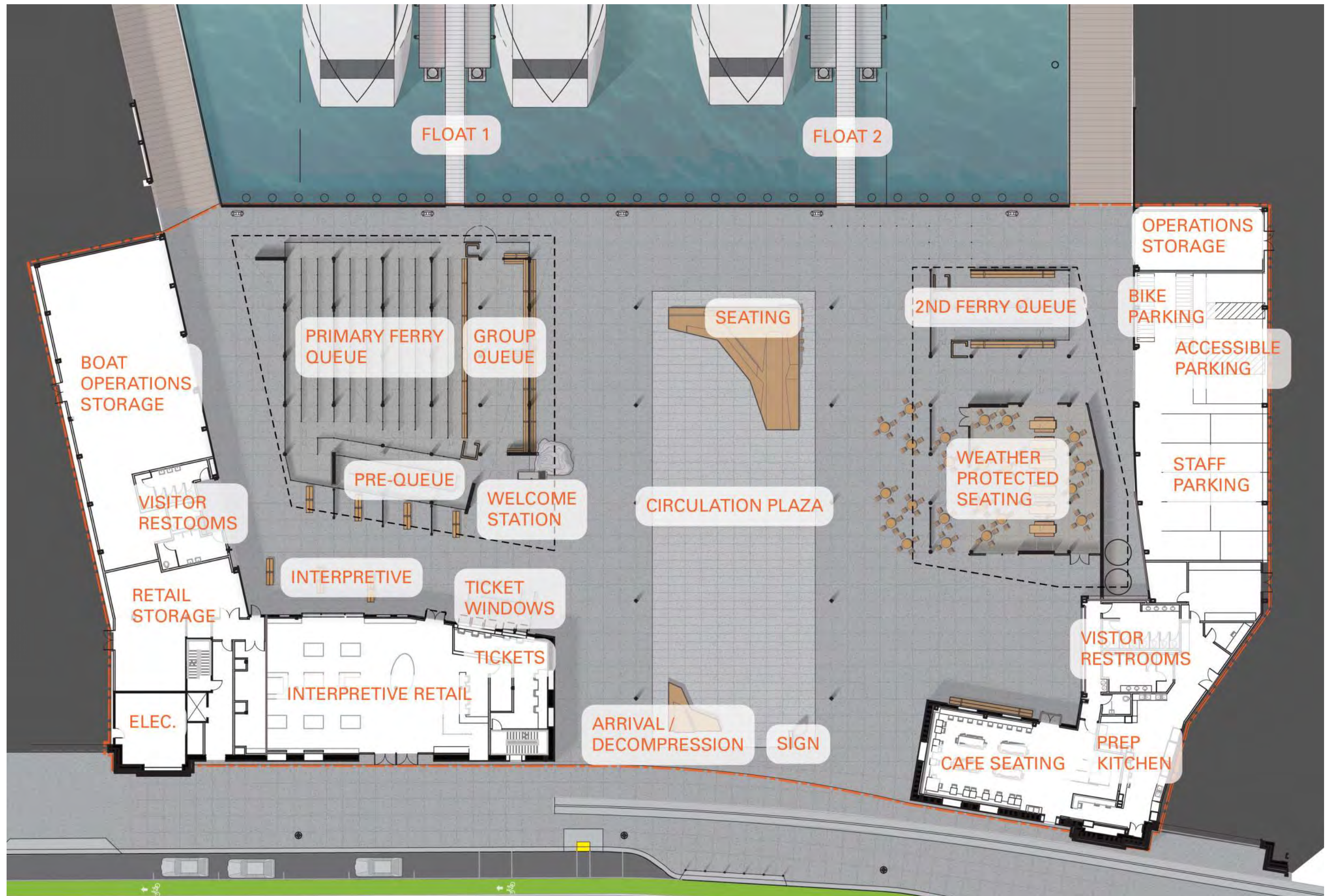
Opportunities for fixed seating features at the corners of the central plaza reinforce the flow of visitors as they enter the site towards the embarkation pavilion and disembarking visitors as they depart the boat loading area towards the cafe and dining services



seating and stage

Fixed seating areas are placed at the corners to form opportunities for visitors to rest and gather. The smaller feature at the entry to the site provides a landmark for gathering visitors. On the northern side of the site the larger seating area contains multiple levels and allows for varied uses such as an informal amphitheater for interpretive talks, bleachers for viewing the waterfront and informal eating nooks.





site program

- Key
- A Main Dock (Berths 1 & 2)
 - B Secondary Dock (Berth 3)
 - C Ferry Primary Queue
 - D Ferry Pre-Queue
 - E Group Queue and Orientation
 - F Ticket Confirmation Booth
 - G Ticket Check Booth
 - H Interpretive Panels
 - I Ticketing Queue
 - J Visitor Contact Desk
 - K Additional Ferry Queue
 - L Photo Taking Area
 - M Fixed Seating Feature
 - N Enclosed Dining Area
 - O Rainwater Cisterns
 - P Civic Plaza
 - Q Outdoor Dining -Loose Site Furniture
 - R Monument Sign
 - S Information Display
 - T Fixed Bench
 - U (E) Drive Apron
 - V Collapsible Bollards
 - W (E) Curb Ramp
 - X (E) Accessible Loading Zone
 - Y (E) Bike Lane
 - Z (E) Pier Apron
 - AA Plaza Light Poles



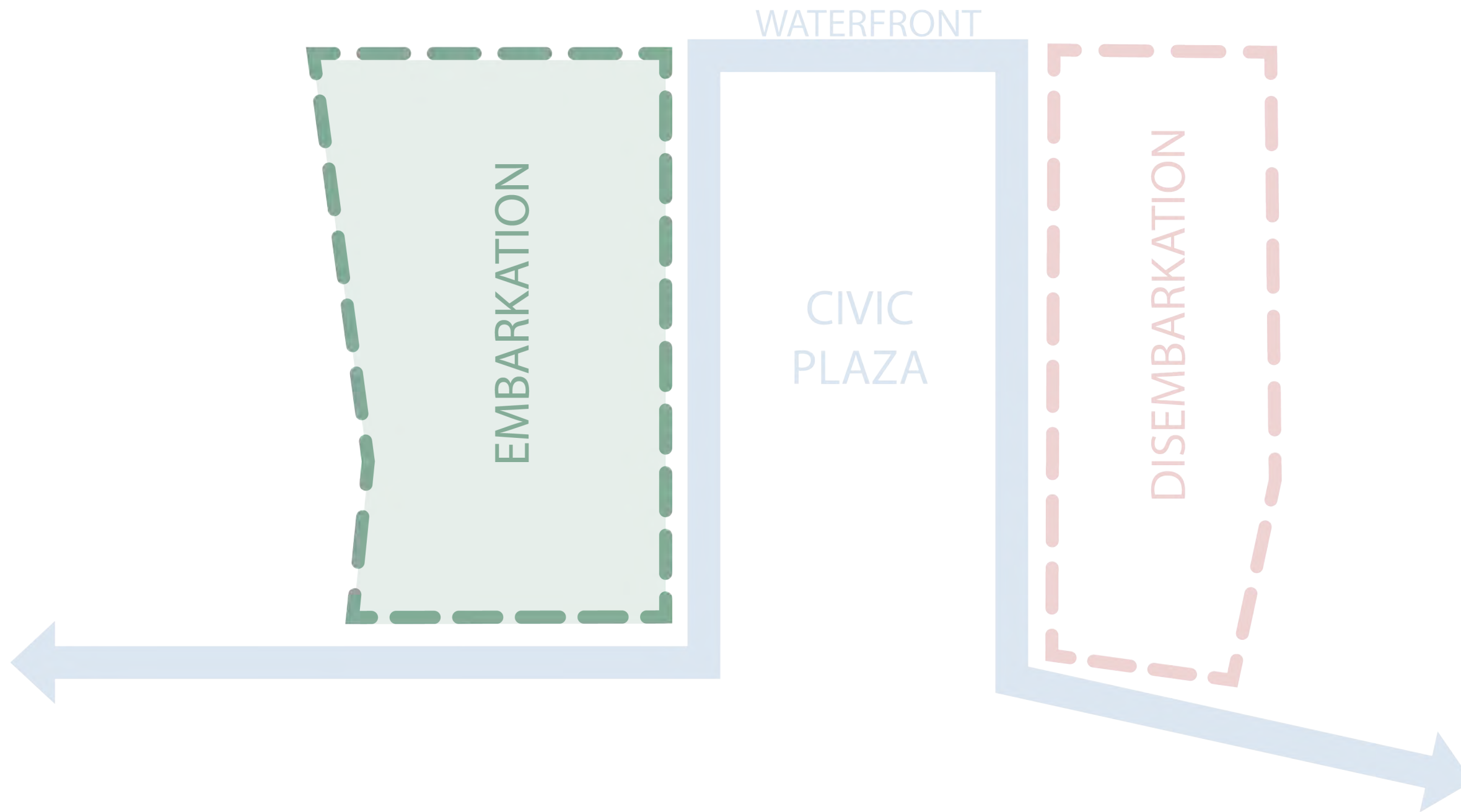
building program

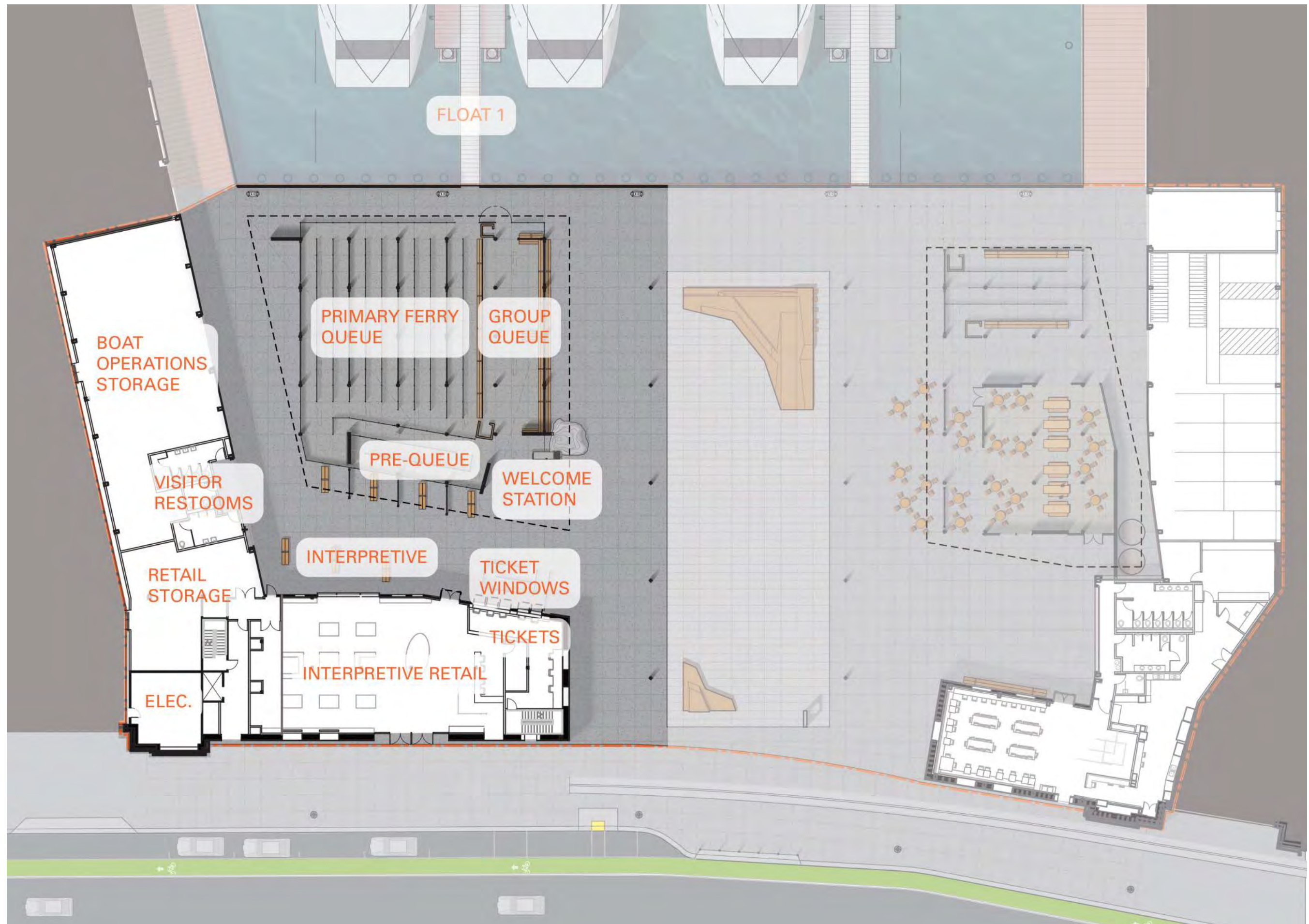
Key

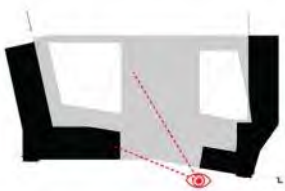
- A** Operations Storage
- B** Men's Restroom
- C** Family Restroom
- D** Women's Restroom
- E** Drinking Fountains
- F** Circulation (Staff)
- G** Staff Break Room / Locker Room
- H** Interpretive Retail
- I** Ticketing Sales & Office
- J** Point of Sales
- K** Information Counter
- L** Queuing
- M** Cafe Service
- N** Cafe Seating
- O** Prep Kitchen
- P** Dry Storage
- Q** Cold Storage
- R** Tandem Staff Parking
- S** Accessible Parking
- T** Bike Parking
- U** Trash & Recycling
- V** Service Loading

*Additional program located in Pier 33 mezzanine and upper level.



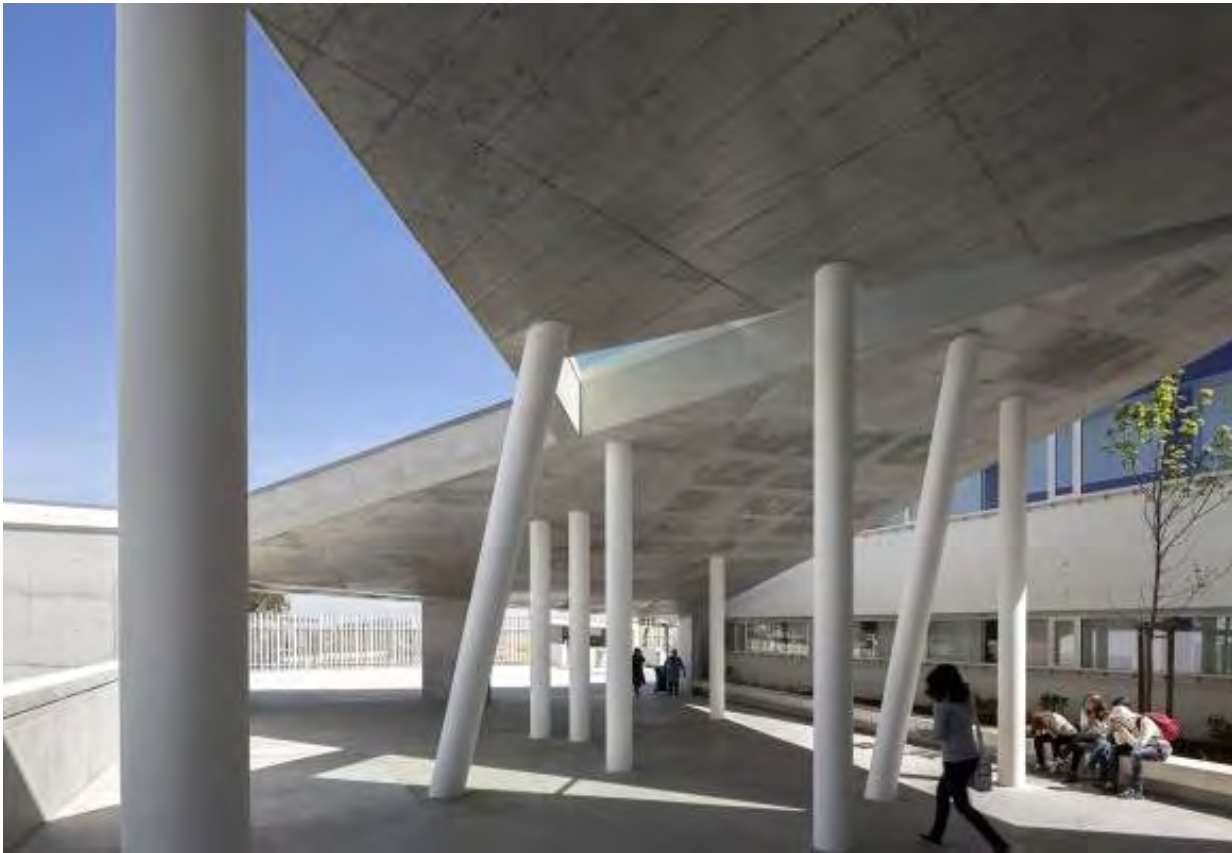




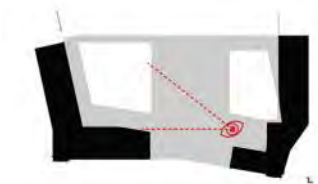
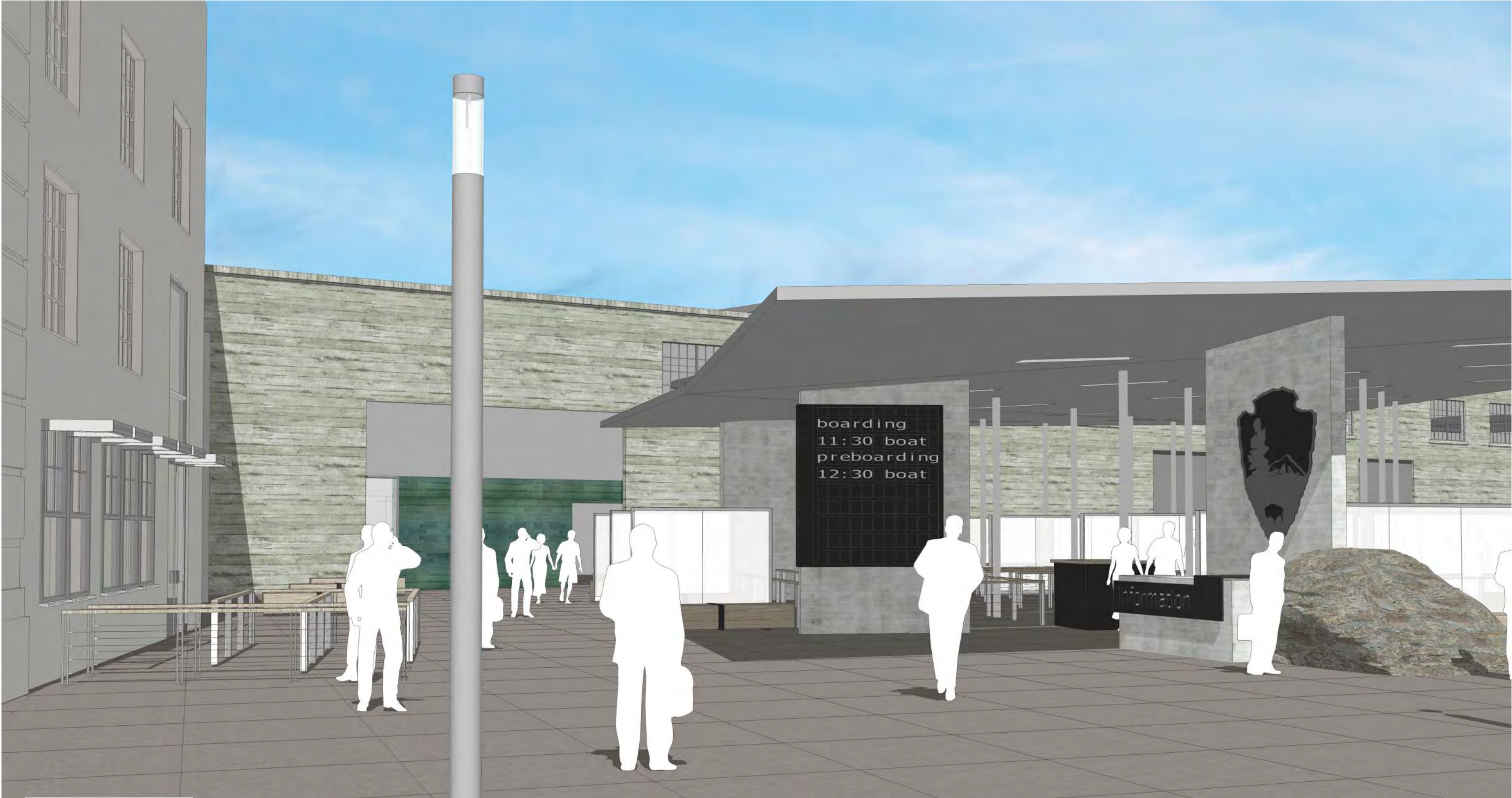




Concrete canopies on steel columns and concrete sheer walls provide a durable organized but flexible structure. By folding the canopies and tapering the edges a very thin profile is achieved. Linear openings with inset acid etched glass provide daylight while keeping out the weather.



View of welcome station & embarkation portal

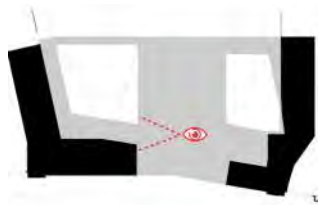




The welcome portal is meant to be the first point of contact and the gateway to the embarkation functions beyond. The wall on the left provides boat schedules and other information via signage, while on the right a person behind a desk answers questions and directs visitors. The rock is both a reference to the monumental signage at the entries to many National Parks and a reference to the island's nickname, it's designed to also function as a meeting point.



View of ticketing windows





interpretation panel references

Human scaled glass panels provide wind breaks, security and interpretive opportunities. A combination of opaque images and text and layers preserves transparency while telling stories of Alcatraz Island and the Port.

Work is currently wrapping up on an interpretive content plan for Alcatraz Island which will provide a great base for development of an interpretive plan and exhibit design for the site.

interpretative stories of
the PRISON

the PORT

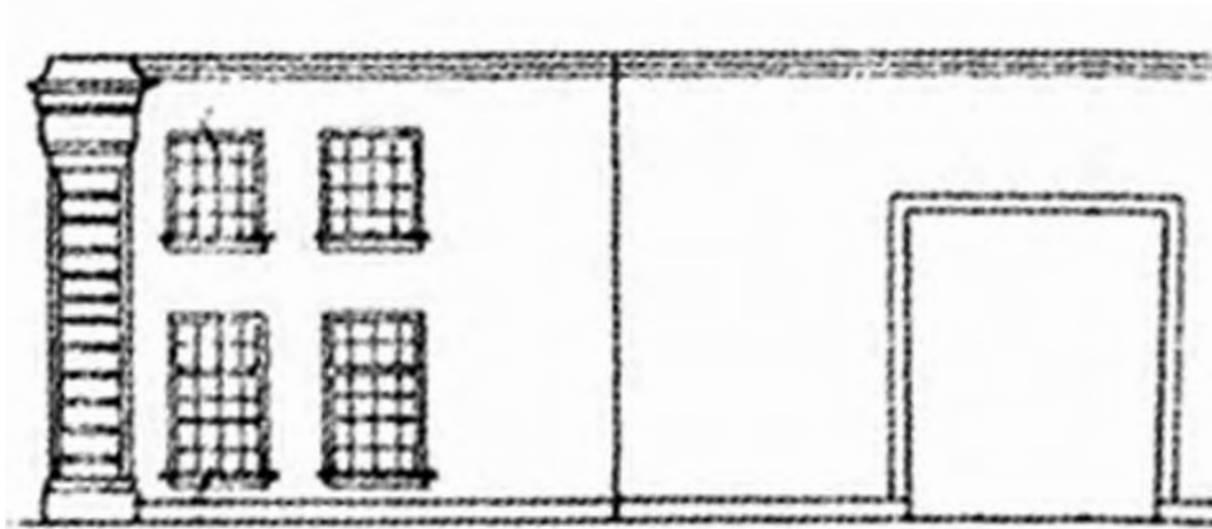
PROTECTION

PROTEST

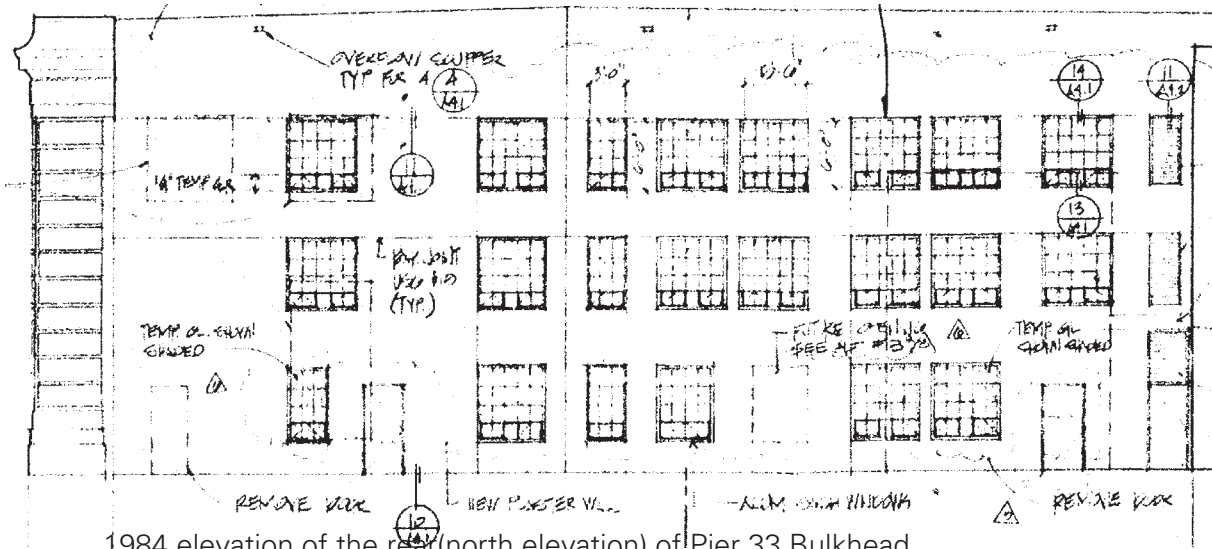


View of ticketing from Pier 33 restrooms

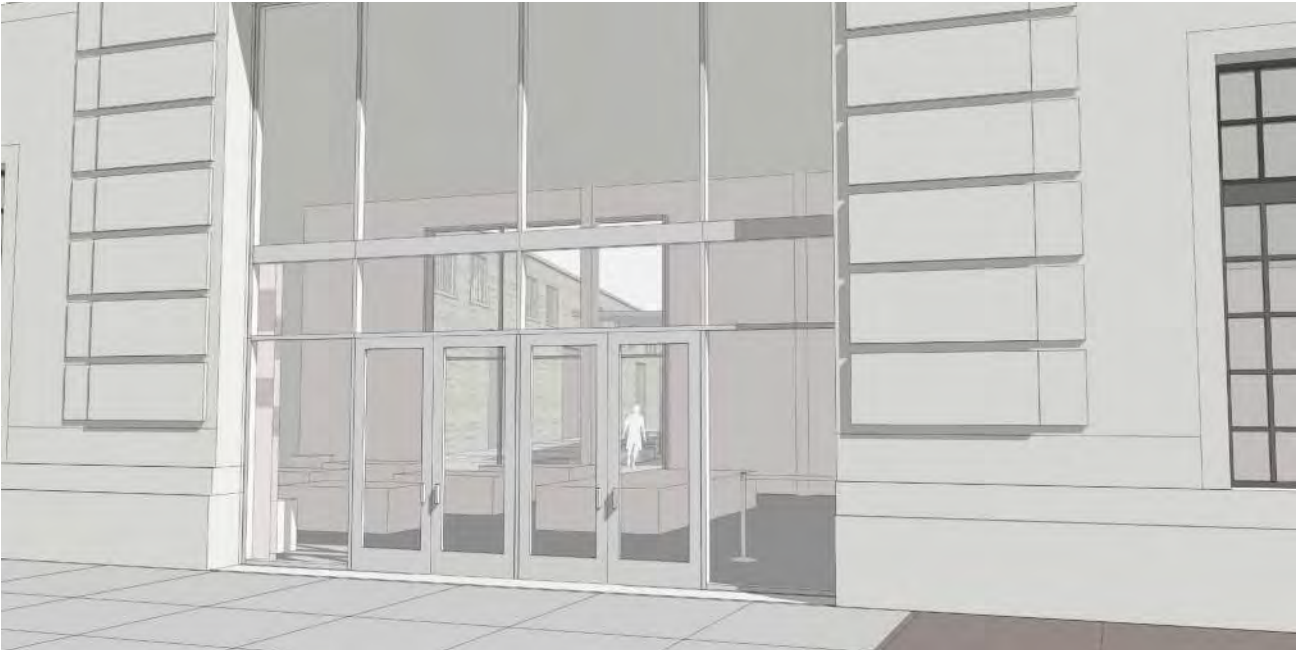




Reconstructed original elevation of the rear (north elevation) of Pier 33 Bulkhead



1984 elevation of the rear (north elevation) of Pier 33 Bulkhead



Although not documented accurately in the historic analyses before now, the Pier 33 Bulkhead appears to have been majorly altered in 1984 when two floors of offices above a restaurant were inserted into the two-story bulkhead. The north façade and structure of the building were substantially altered at this time. While originally the bulkhead would have had two diagonally offset massive openings that allowed trains to pass through onto the apron beyond (similar to the photo shown here), the 1984 renovation made the entire bulkhead fairly opaque.

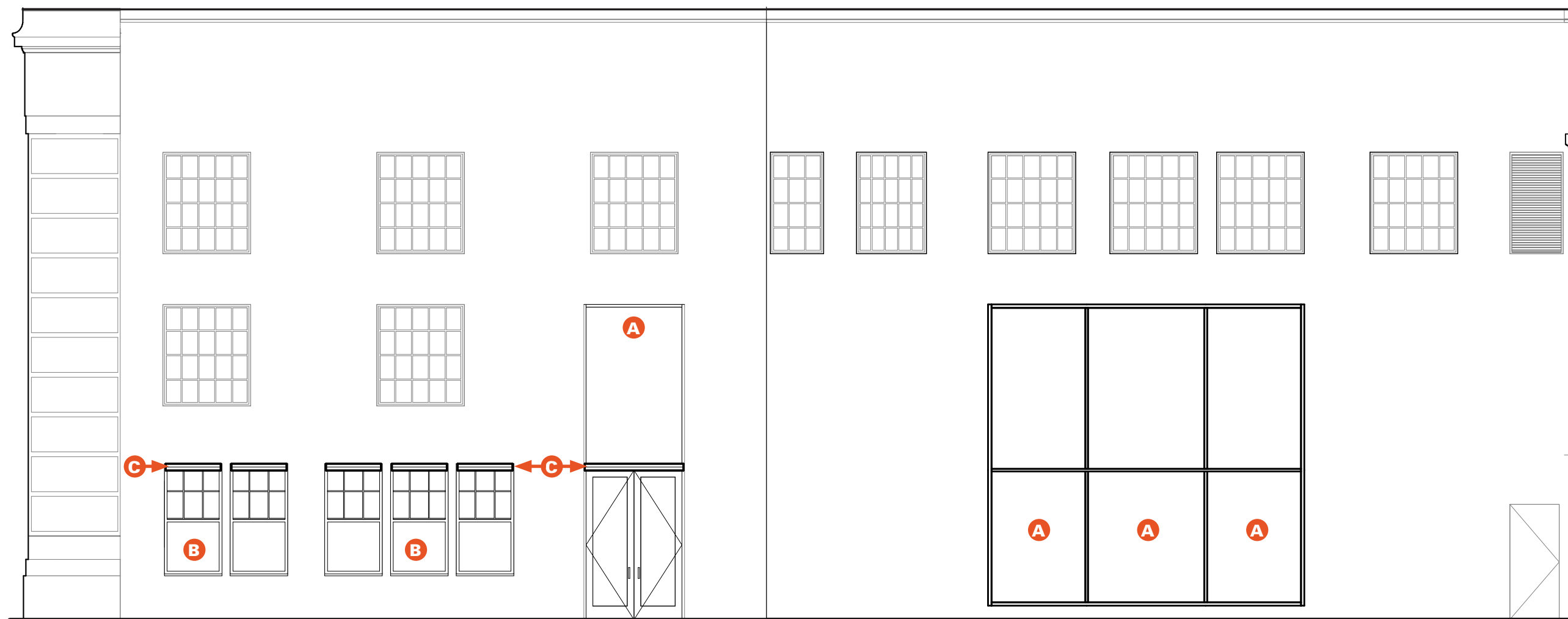
The design proposes to remove the majority of the second level restoring some of the larger scale of the bulkhead space, and revises the non-contributing rear façade to contain a single large opening reminiscent of the original train door. Combined with restoring some of the size and transparency of the front opening it becomes possible to again see straight through the bulkhead as indicated in the image on the following page.



Image showing typical rear (North) facade of Pier 33, September 26, 1945 (San Francisco History Center, San Francisco Public Library)



Image showing typical view through bulkhead, May 1964 (San Francisco History Center, San Francisco Public Library)



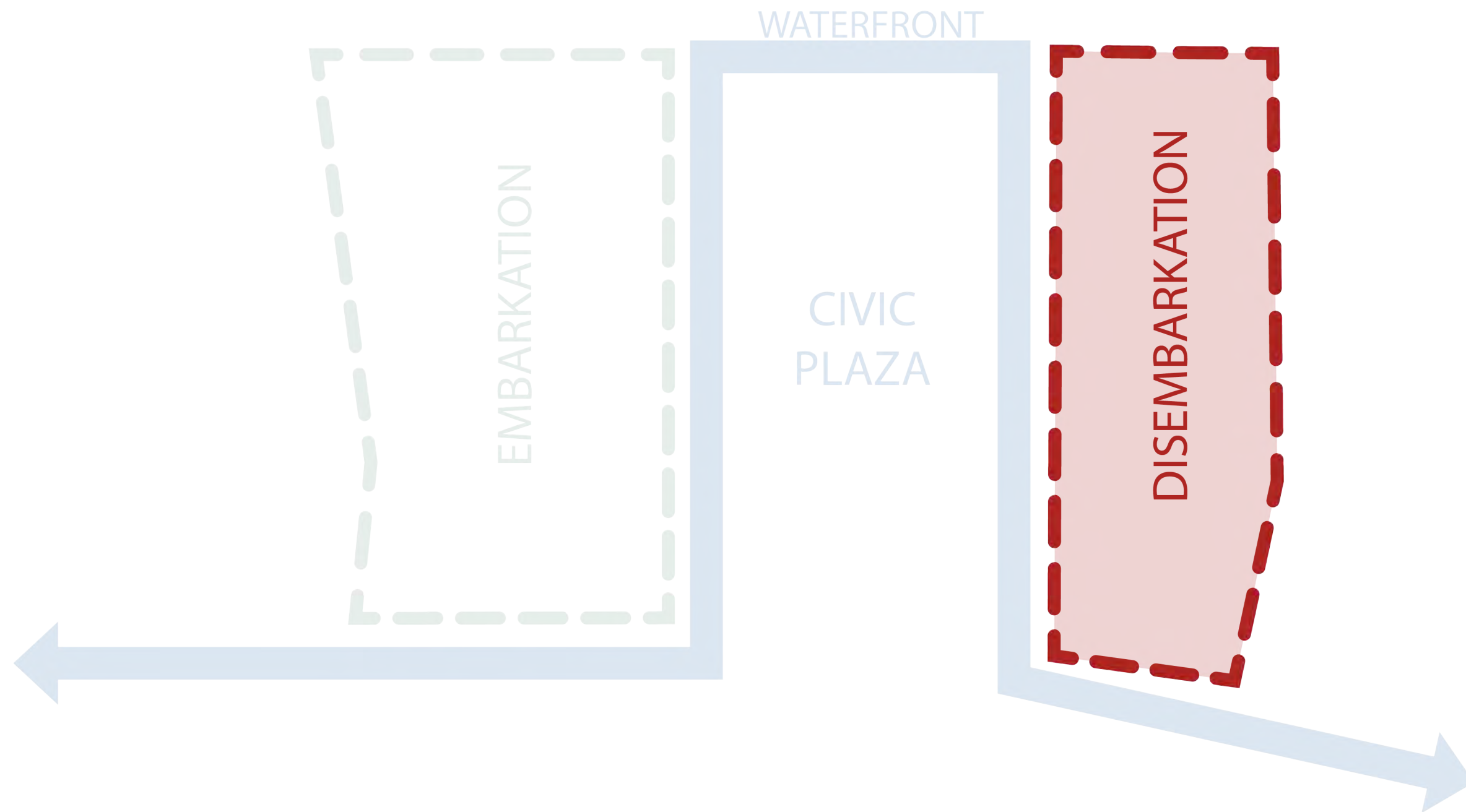
Key

- A** Aluminum Curtain Wall
- B** Ticket Window with stainless steel counter
- C** Glass and Aluminum Awning

Large opening reminiscent of original door, but detailed in keeping with Secretary's Standard No. 9 recreates some of the original diagonal transparency of the bulkhead.



Section Perspective: Facing water





View of cafe from plaza







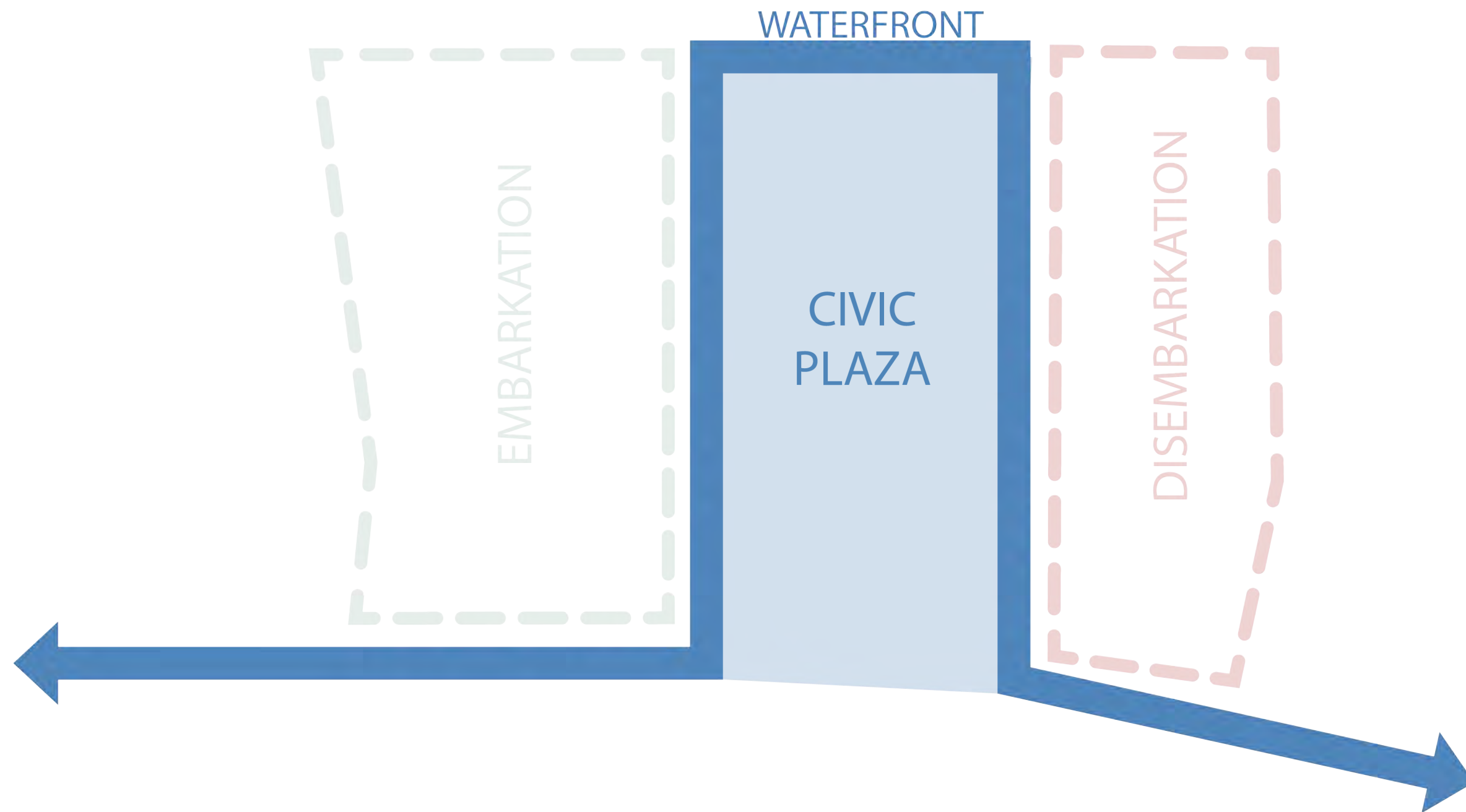
Section through interior at Cafe



Cafe precedents: Hard Water + Blue Bottle



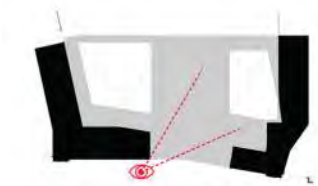
Section Perspective: Facing Embarcadero

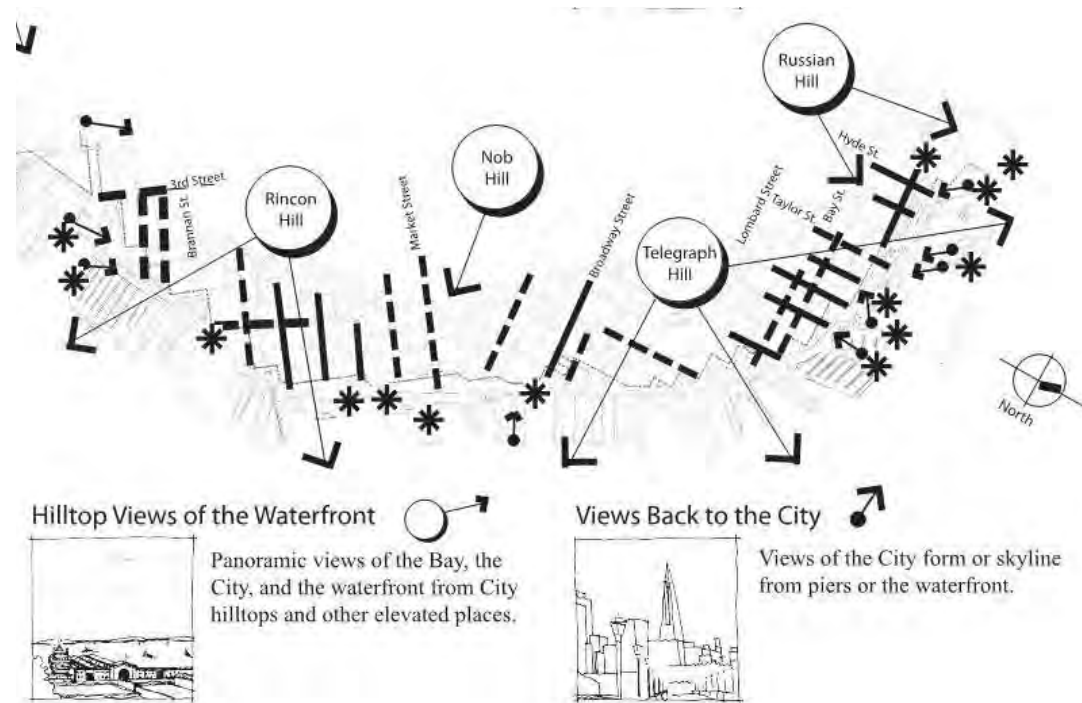




View of waterfront from Embarcadero median







viewshed diagram from SFPort Waterfront Plan



angle of bulkhead buildings in relationship to Pier 31 1/2 opening

monument sign

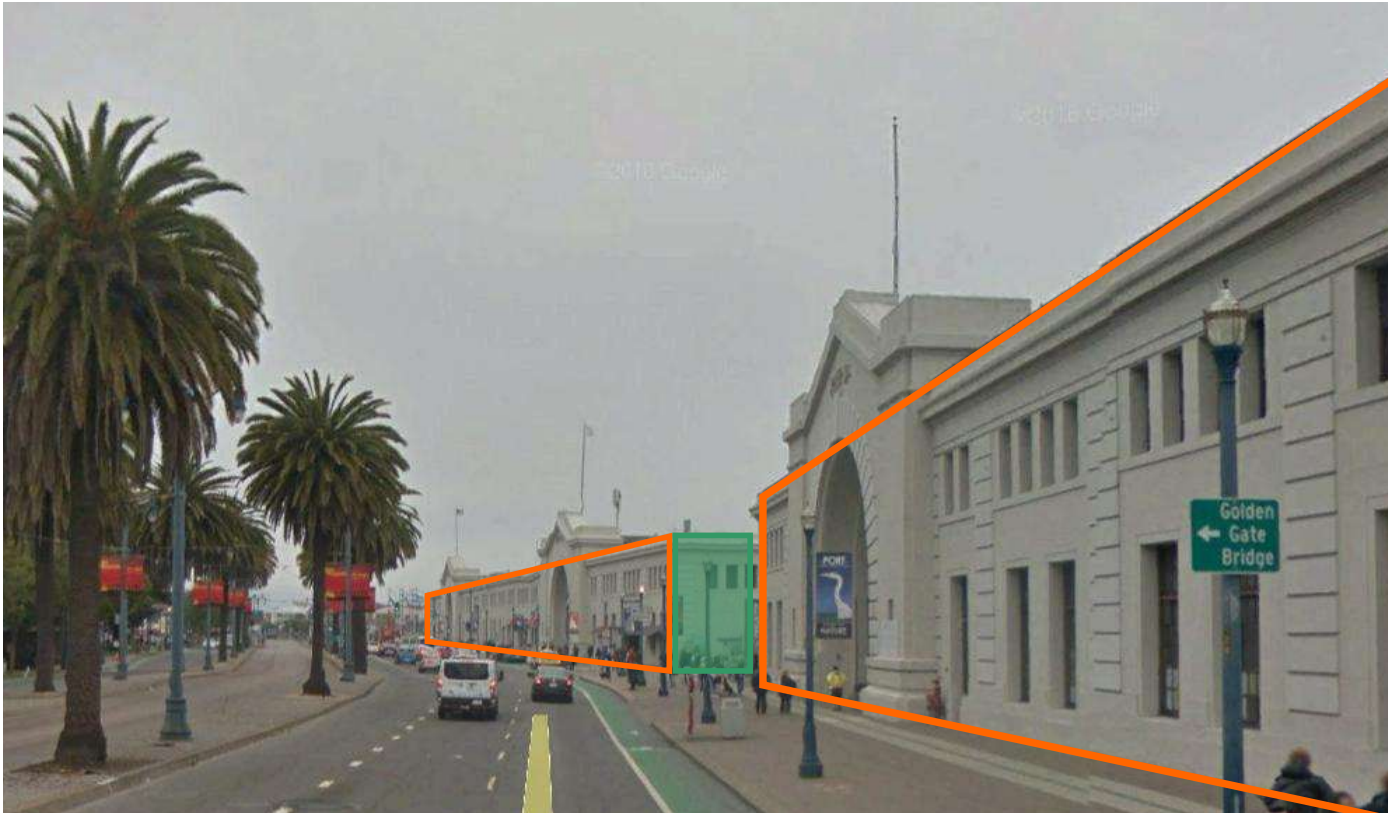
The location of the Embarkation Site at marginal wharf Pier 31 1/2 occurs at the opening between two long runs of pier bulkhead building facades provides a need for a strong and identifiable landmark to provide wayfinding and landmarking for visitors unfamiliar with the city as well as a clear identity that demarcates the NPS and GGNPC presence at the site.

The entrance lies at a joint in the angles of the facades which presents the narrow faces of the bulkhead buildings edges to vehicular and pedestrian traffic alike.

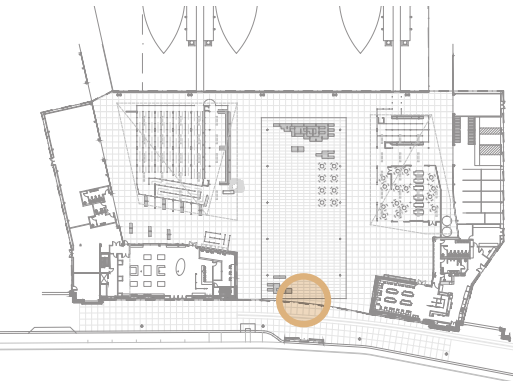
Occupying this space with a clear entry marker will provide strong identity to the site and its use to visitors and residence alike.



view of Pier 31 1/2 opening from North along Embarcadero



view of Pier 31 1/2 opening from South along Embarcadero





Alcatraz Embarcation Site proposed monument sign design



Example of monument signage at SFPort - Exploratorium

The proposed monument sign combines the material characteristics of the Golden Gate National Recreation Area standard signs with the form and character of the Port of San Francisco Signage Design Guidelines.

The sign is 15 foot tall, 5 foot wide and 1 foot deep. It consists of panels of steel mounted to a cast in place concrete infill structure.

The defining and recognizable feature of the monument sign is a cut out form in the shape of the National Park Service shield.

The name of the site and additional logos and information can be inlayed or cast into the concrete at the edge of the sign or affixed to the face of the steel faces.



Example of Golden Gate National Recreation Area standard sign
ALCATRAZ EMBARKATION SITE



Example of National Park Service Shield signage at Lands End
JULY 14, 2017

seating feature

The proposed seating features serve as informal seating and gathering places for Alcatraz visitors and the general public within the central Civic Plaza area.

Composed of concrete plinths with wood tops and surfaces the seating features provide a variety of seating and gathering functions. A smaller feature at the entry to the plaza provides a landmark for groups and families to gather and rest as they arrive at the embarkation site. A larger feature at the North end of the plaza provides an attraction at the waters edge that serves multiple activities including learning, eating, and viewing.

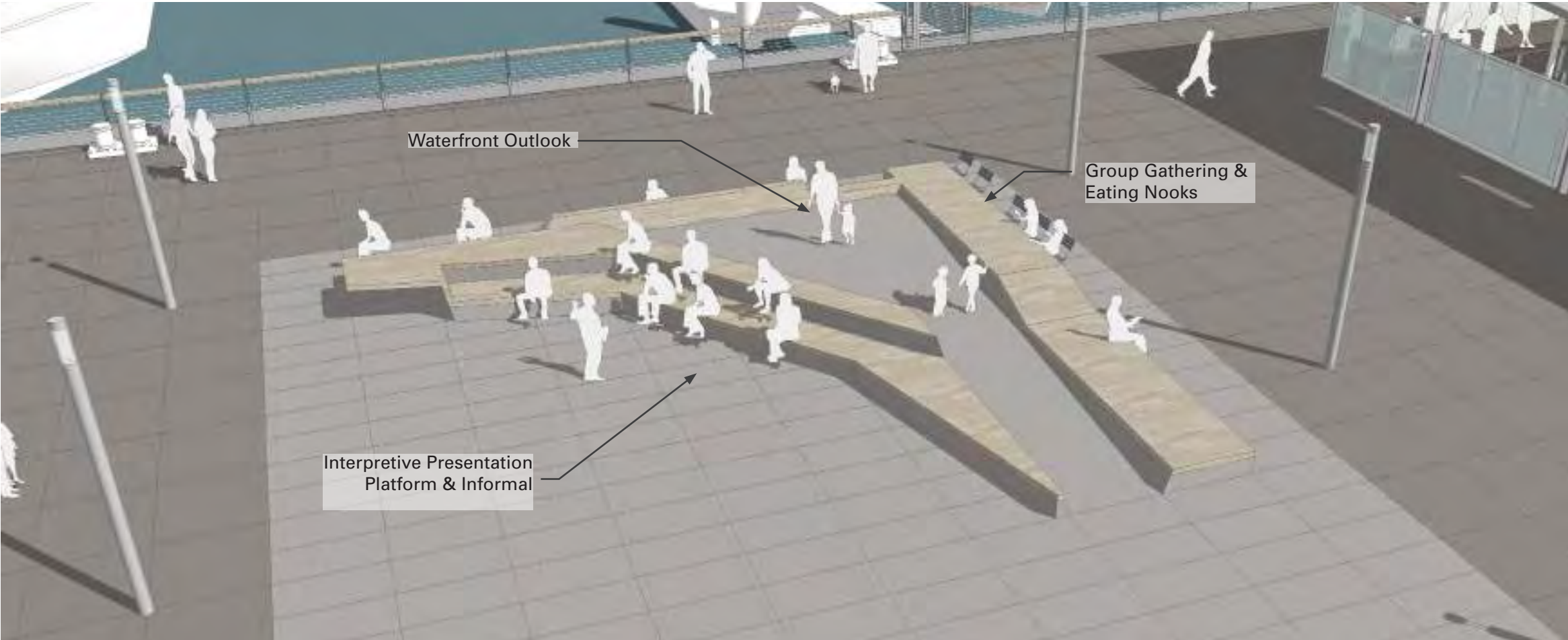


Seating Feature at South side of Civic Plaza



Seating feature at North side of Civic Plaza





Seating feature at North side of Civic Plaza

The larger seating feature on the North side of the central Civic Plaza serves multiple functions for visitors:

1. An informal amphitheater and stage face the interior of the plaza and provide an area for groups to gather to enjoy presentations by interpretive staff about Alcatraz Island and the Port of San Francisco.
2. A table height counter and wide backless bench on the Cafe facing side provide areas to gather in small groups and allow for surfaces for eating and resting.
3. A sloped walk allows access to a central platform that is 20" above the plaza surface allowing for open views over the crowds and out on to the Bay. On the waterfront facing side high backed seating is provided to allow an outlook for enjoying the views of the San Francisco Bay.

The maximum height of the feature is 40" at the high backed bench. The majority of the element is at a 30" height. This allows for uninterrupted views over the feature to the Bay view beyond.



Interpretive Presentations

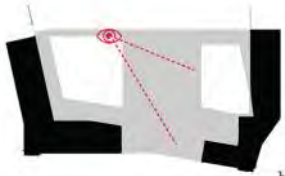


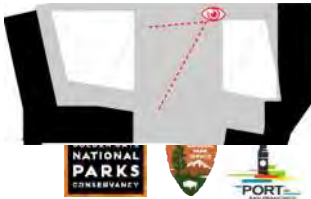
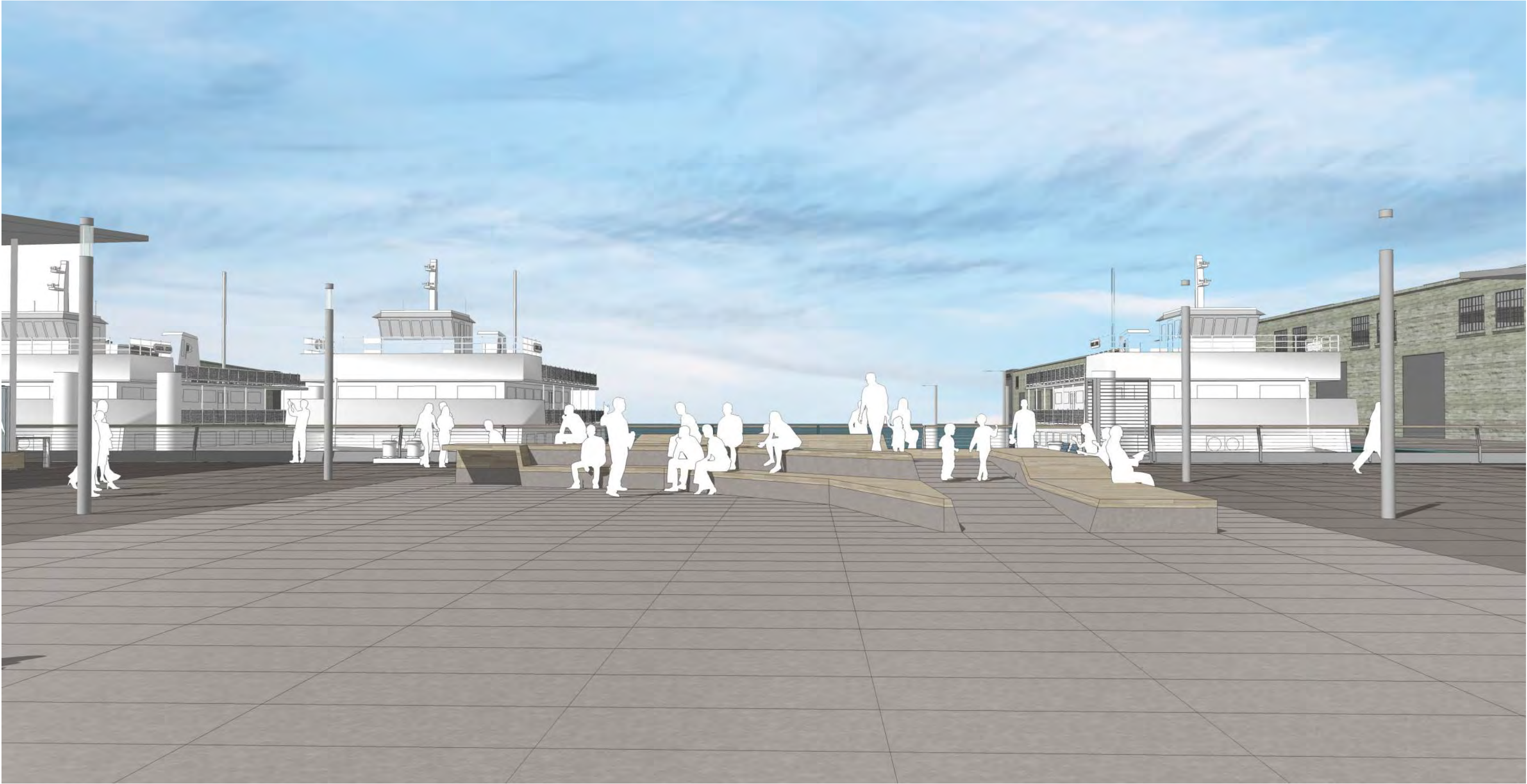
Group Gathering & Eating



Waterfront Outlook

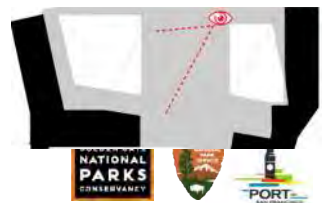
View of protected seating from disembarkation





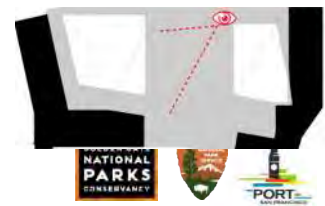
View of amphitheater from alternative path to cafe





View of amphitheater from alternative path to cafe







appendix i

historic resources

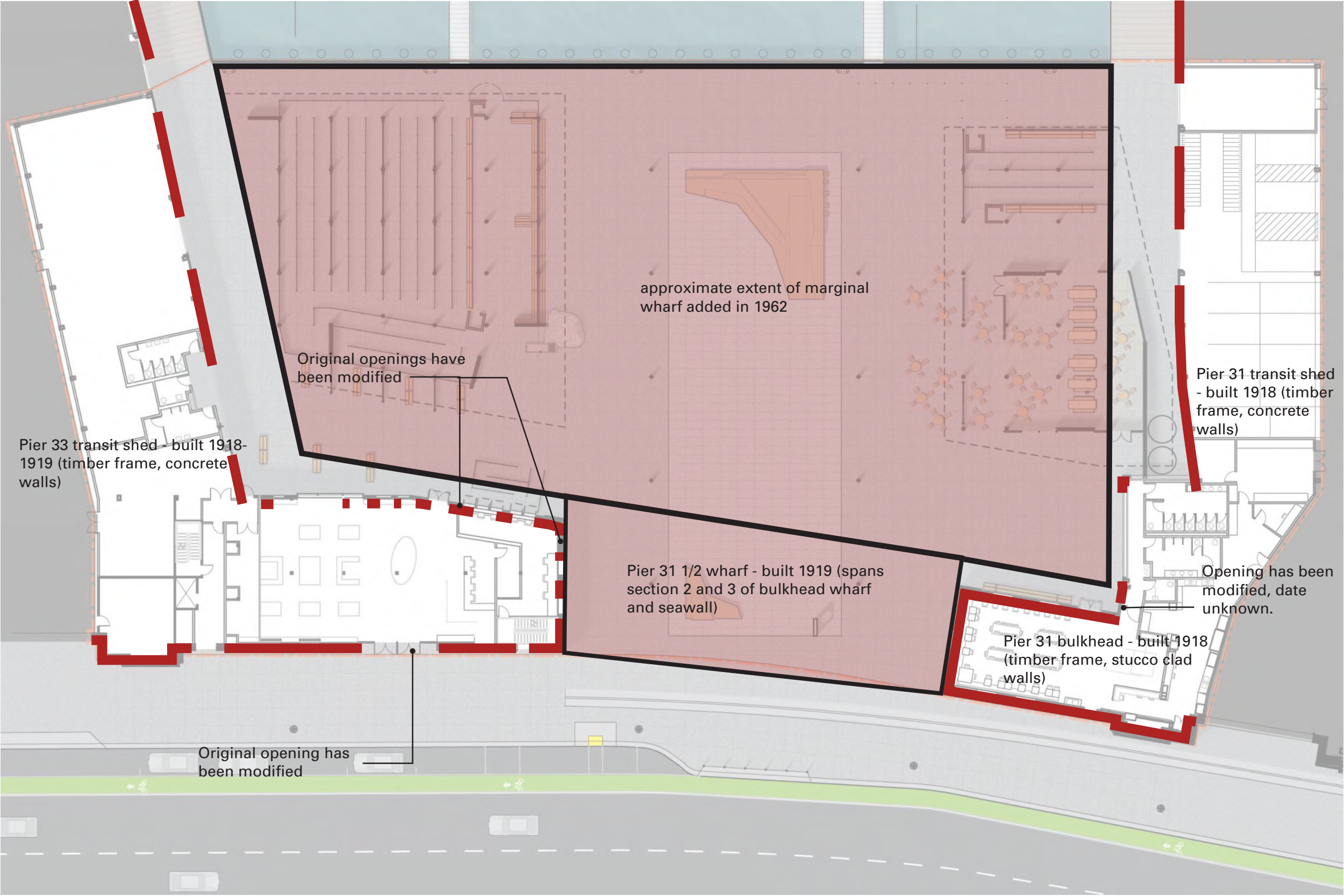
Unaltered Historic Fabric

Periods of Significance:
1878-1946 : Government,
Commerce, Transportation
1934 : Labor
1878-1946 : Engineering
1889-1903, 1912-1938 :Architecture
1878-1938 : Community Planning
and Development

Drawings permitted in 1984
indicate that the bulk of the
modifications to the Pier 33
bulkhead occurred at this time.

Currently modifications are
underway at Pier 31 which
include seismic strengthening
and utility and infrastructure
upgrades.

Strengthening of the original
wharf and repairs to the 1962
infill wharf are currently in
design.

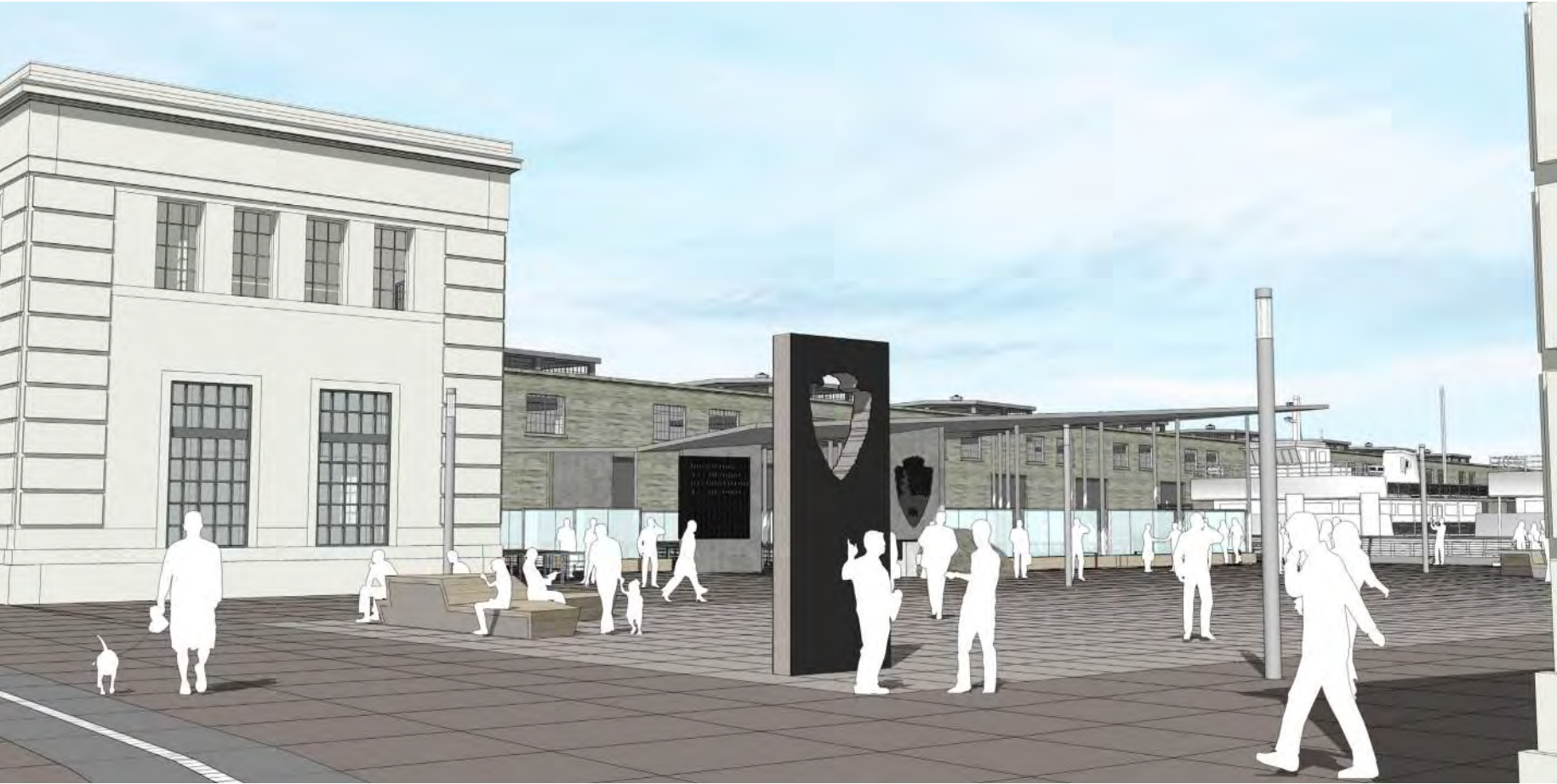




existing & proposed site condition

View from Embarcadero median





existing & proposed site condition

View southeast from Embarcadero





existing & proposed site condition

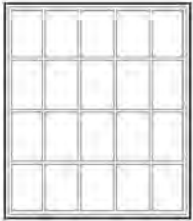
View from Telegraph Hill

existing view from telegraph hill

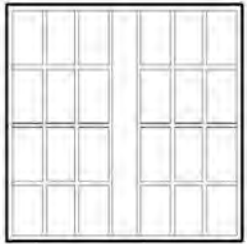


existing facade openings bulkheads 31 & 33

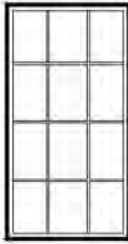
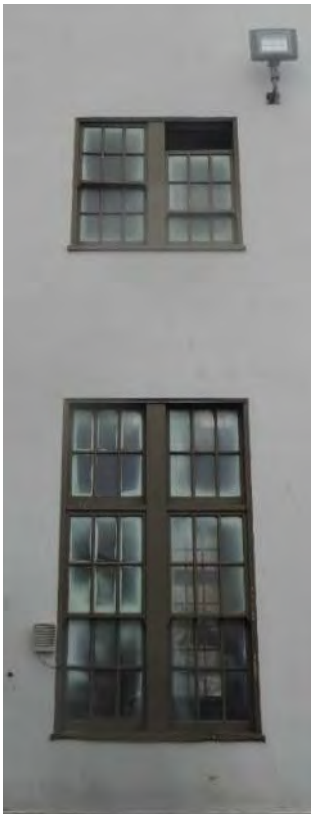
A catalog of the existing window types at the Bulkheads reveals a great variety (only the three images at center are original character defining elements).



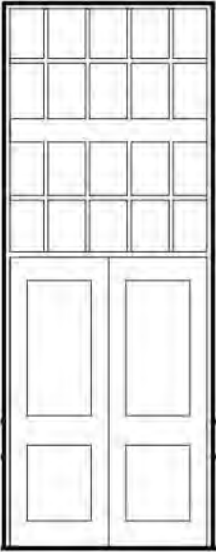
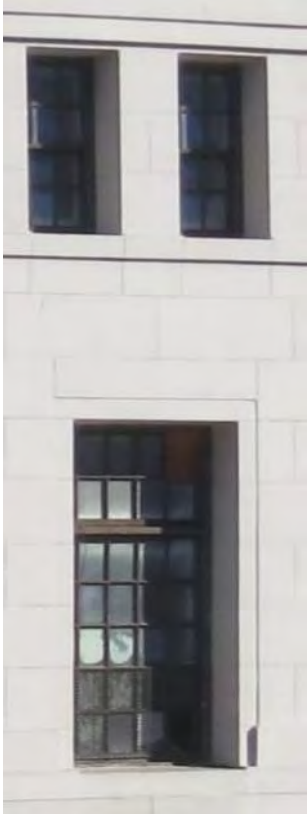
ALUM. 20 LITE WINDOW
P 33 NORTHEAST FACADE
1980s RENOVATION



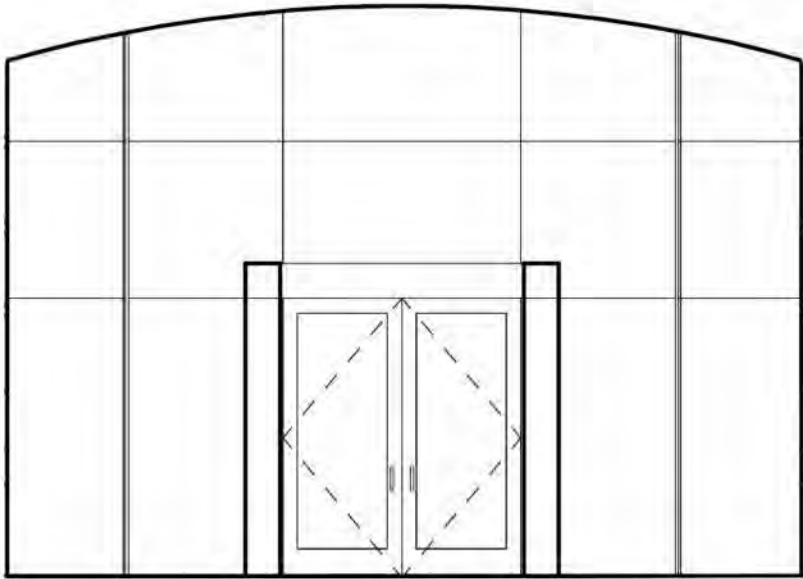
PAIRED WOOD 12 LITE
DOUBLE HANG WINDOW
3RD LEVEL &
1.5 LEVEL WINDOW
P31 NORTHEAST FACADE



WOOD 12 LITE DOUBLE
HANG WINDOW
3RD LEVEL &
1.5 LEVEL WINDOW
P33 SOUTHWEST FACADE



(E) DOOR UNDER
WINDOW



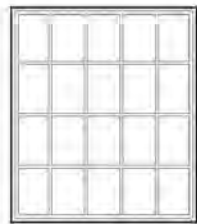
(E) CURTAINWALL IN MODIFIED
SHALLOW ARCH WHERE TRAIN
OPENING USED TO BE



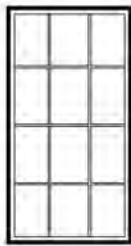
existing and proposed facade openings
bulkheads 31 & 33

The proposed new openings would be contemporary in construction while matching the proportions and materials of the historic windows, in keeping with Secretary's Standard number 9.

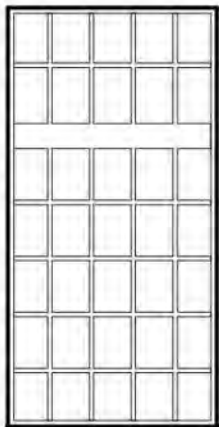
It is unclear if the existing windows at Pier 33 East facade remain within the wall. If not, new replacement windows would have to be constructed in keeping with Secretary's Standard number 6.



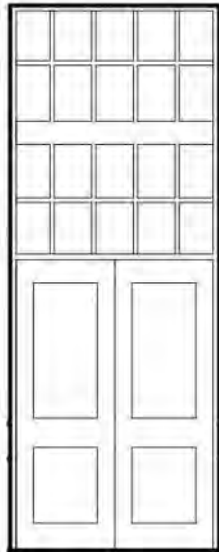
(E) ALUM. 20 LITE WINDOW
P 33 NORTHEAST FACADE
1980s RENOVATION



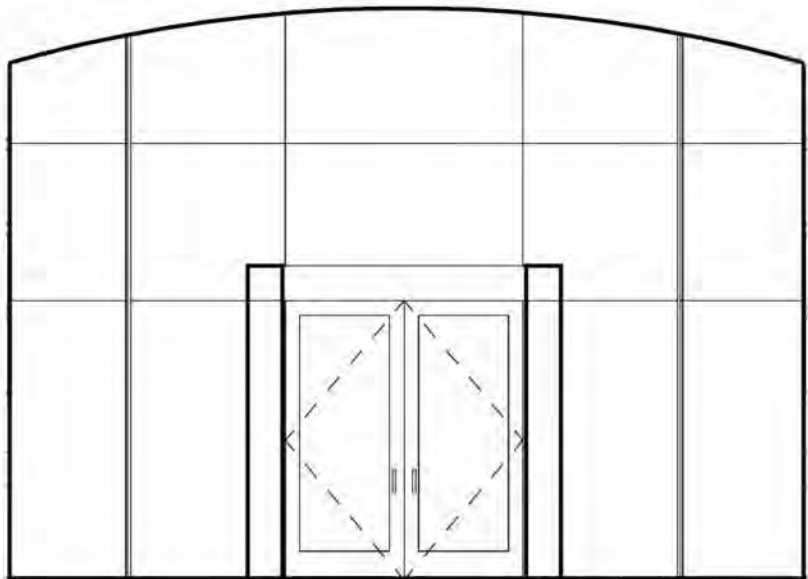
(E) WOOD 12 LITE
DOUBLE HANG
WINDOW
3RD LEVEL



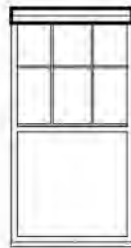
(E) 1.5 LEVEL WINDOW
P33 SOUTHWEST FACADE



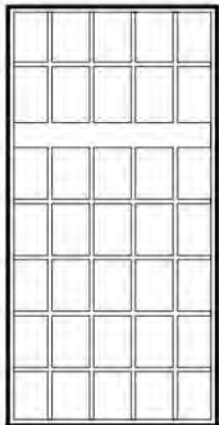
(E) DOOR UNDER
WINDOW



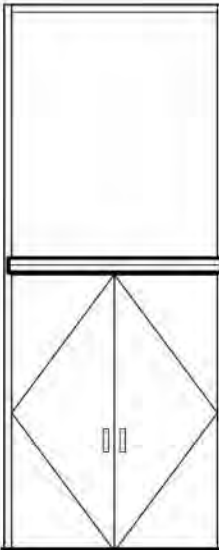
(E) CURTAINWALL IN HISTORIC
TRAIN OPENING



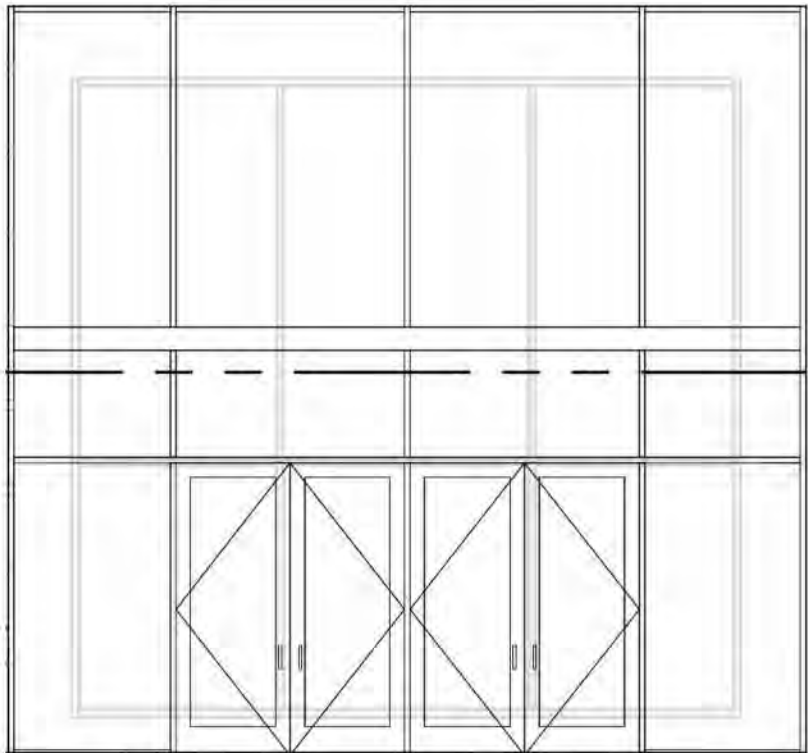
PROPOSED TICKET
WINDOW



PROPOSED REPLACEMENT
WINDOW
P33 EAST FACADE (FACING P31)

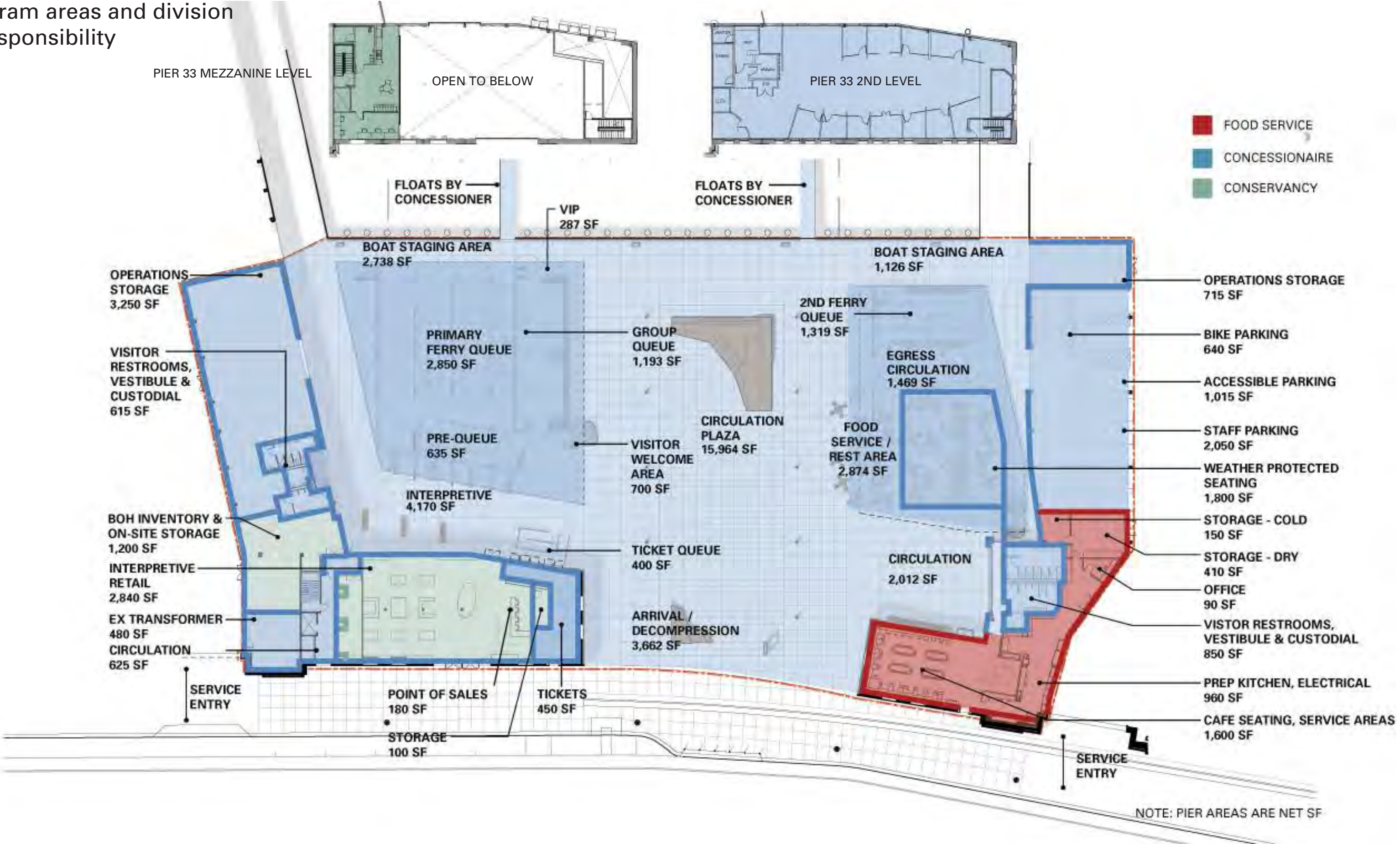


PROPOSED DOOR
UNDER WINDOW



PROPOSED CURTAINWALL IN
HISTORIC TRAIN OPENINGS

program areas and division of responsibility



		Net Square Feet (NSF)			Gross Square Feet (GSF)	
		Detailed Program	Concept Design	Schematic Design	EIS Diagram	Lease
CONSERVANCY	Food Service					
	Pier 31 Interior	Café - Seating, Service Areas	1,606	1,600	1,675	3,500
		Prep Kitchen, Electrical	556	515	605	included above
		Storage - Dry	410	700	615	included above
		Storage - Cold	150	350	460	included above
		SUBTOTAL	2,722	3,165	3,355	3500
	Marginal Wharf	Weather Protected Seating	700	700	2,335	--
		Food Service / Rest Area	5,000	6,535	2,874	470
		SUBTOTAL	5,700	7,235	5,209	470
	TOTAL		8,422	10,400	8,564	3,970
CONSERVANCY	Interpretive Retail					
	Pier 33 Interior	Interpretive Retail	2,843	2,600	3,065	2,930
		Point of Sales	100	400	400	included above
		On-Site Storage	1,000	1,000	1,000	--
		Back of House Inventory	250	250	365	--
		Staff Break Room / Locker Room	250	260	240	--
		Supervisors Office / Cash Room	200	220	240	--
		Open Office	200	300	465	--
		Staff Restroom / Shower	150	150	95	--
		IT / Electrical	100	80	45	--
	TOTAL		5,093	5,260	5,915	2,930
CONCESSIONER	Boat Operations					
	Pier 31 Interior	Operations Storage	716	815	815	1,310
		Accessible Parking - 3qty	3,367	1,015	1,015	3,680
		Staff Parking - 10 qty Tandem	1,825	2,050	2,050	included above
		Bike Parking - Public & Staff	500	640	640	included above
		Visitor Restrooms, Vestibule, & Custodial	900	985	875	1,550
		SUBTOTAL	7,308	5,505	5,395	6,540
	Pier 33 Interior	Operations Storage	3,242	2,530	2,955	4,200
		Circulation	--	1,400	625	2,310
		Visitor Restrooms, Vestibule, & Custodial	900	675	460	590
		Tickets	600	600	480	520
		Exhibit Space	--	--	--	500
		Administrative Offices	4,150	4,150	4,150	4,000
		Existing Transformer	473	480	480	--
		SUBTOTAL	9,365	9,835	9,150	11,620
	Marginal Wharf	Public Plaza	15,000	15,090	15,964	15,860
		Circulation	4,000	--	3,481	7,450
		Arrival / Decompression	1,600	3,575	3,662	1,870
		Ticket Queue	430	455	400	400
		Visitor Contact Station	100	100	700	100
		Group Tour Orientation	1,000	1,045	1,193	2,000
		Ferry Queue (primary, pre, VIP, photo)	4,000	4,650	3,897	4,190
		GGNRA Ferry Queue	800	800	1,319	--
		Interpretive Exhibits /Rest Area	5,500	5,515	4,170	6,980
		Boat Staging Area	2,680	2,685	2,738	2,600
		Future Third Berth Staging	1,550	1,650	1,126	1,550
		SUBTOTAL	36,660	35,565	38,650	43,000
	TOTAL		53,333	50,905	53,195	61,160
	Site Total					
	Pier 31 Interior		10,030	8,670	8,750	10,040
	Pier 33 Interior		14,458	15,095	15,065	14,550
	Marginal Wharf		42,360	42,800	43,859	43,470
	TOTAL		66,848	66,565	67,674	68,060

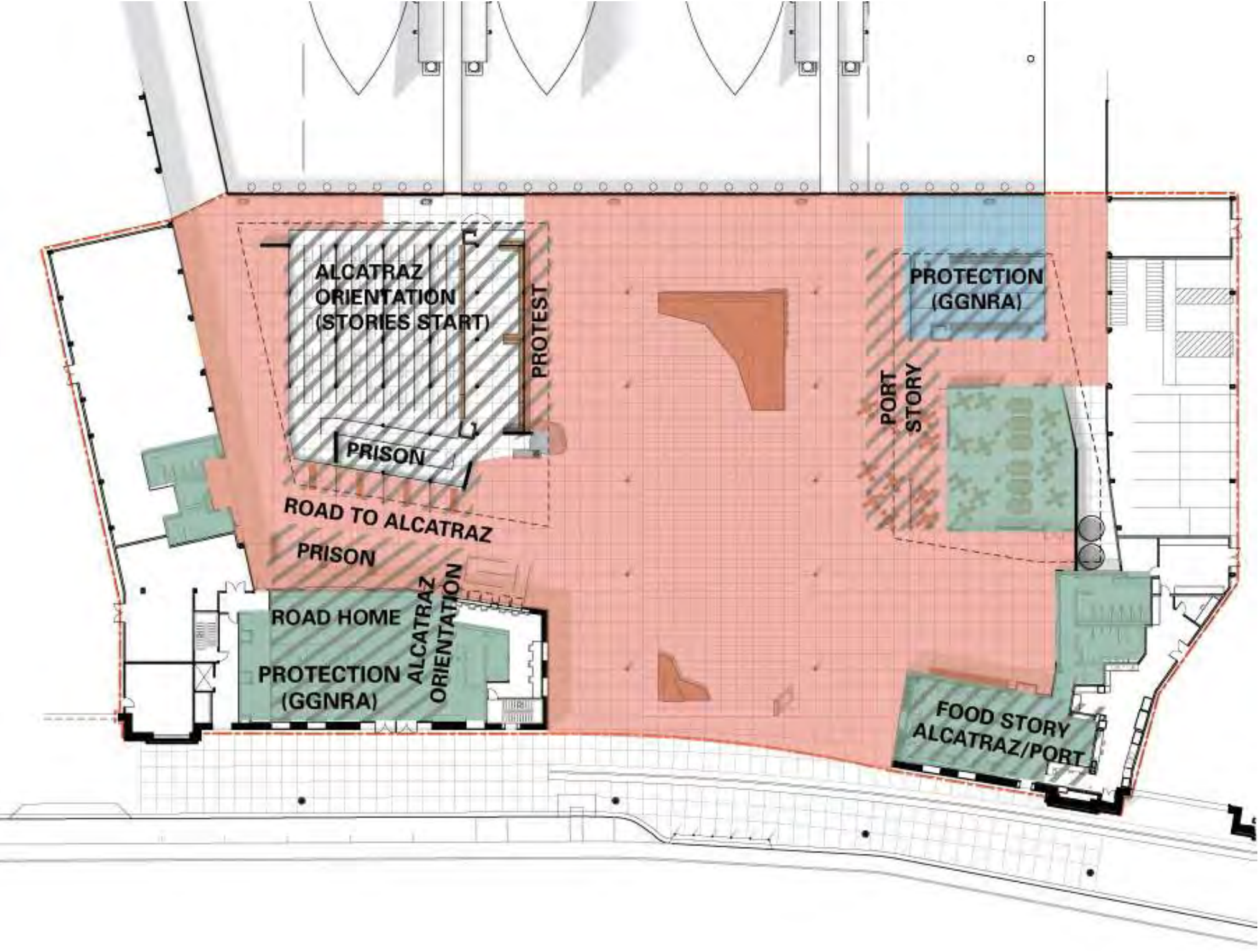
•Detailed Program: Based on the Enviromental Impact Statement dated January 2017, with further development EHDD and client meetings.

•Concept Design: Preliminary Concept Package dated Dec. 21, 2016.

•Schematic Design: Representative of the current design as shown in this document.

•EIS Diagram: Alcatraz Ferry Embarkation Final Enviromental Impact Statement dated January 2017, with input from AnchorQEA and the National Parks Service.

•Lease: Memorandum of Understanding, dated July 7, 2016 outlining the lease terms for a future ferry concessioner and Golden Gate National Parks Conservancy.



queuing and boat loading operations

The Embarkation Pavilion is configured to accommodate the Queuing and Boat Loading operations while providing public interpretive exhibits and simplifying the ticket checking and scanning protocols. Since most visitors arrive to the site with their advance purchased tickets in hand they are oriented towards the Visitor Welcome Area. Visitors who need to purchase tickets will be directed to the Ticket Purchase Queue & Windows in the bulkhead building behind them.

The Visitor Welcome Area provides orientation and information to arriving visitors in the form of an Information Display Board with ferry & events schedules and a Visitor Contact Booth where ferry operations staff and/or NPS ranger or GGNPC staff are available. Visitors tickets are checked and directed into the General Queuing area or the Group Queue area at the Ticket Check Booth at the entrance to the Queuing Area.

Group Tours are contained in a 1193 sf area containing perimeter benches and interpretive panels. This space will hold 80 persons at 15sf per person. Individual Visitors are directed into a queue circulation route that leads to the Photo Taking area. Visitors who have arrived earlier than the currently queuing boat will

be directed into a Pre-Queue area that serves as a stationary queue lane. This area can also be optionally configured as an open interpretive experience area.

The Photo Taking area is located to allow for the use of a shear wall of the canopy structure as the backdrop for the photography. Visitors are directed by Ferry Operator Staff at the Photo Taking area into one of the eleven Primary Individual Queue lanes. The Primary Individual Queue consists of 11 stationary queue lanes that visitors will be sorted into while they wait to embark the ferry. The Queue is designed to contain 380 persons. This quantity is based on a 5' wide queue and providing between 7.5 sf per person. A NPS Ranger can address the queued visitors from the front of the Queue area through a speaker system integrated into the canopy structure.

A VIP Queue area of 50 sf with a bench for waiting is located near the embarkation entrance gate. Visitors tickets are confirmed before embarkation at a Ticket booth before entering the Ferry Dock Ramp.

Departing Visitors will debark from the Ferry into the Circulation Plaza. A location for the Photo Sales Booth is located at the Public Interpretive Exhibit along this route.

LEGEND

●

STATIONARY QUEUE LANE/AREA

←

QUEUE CIRCULATION ROUTE

↔

SERVICE ACCESS

→

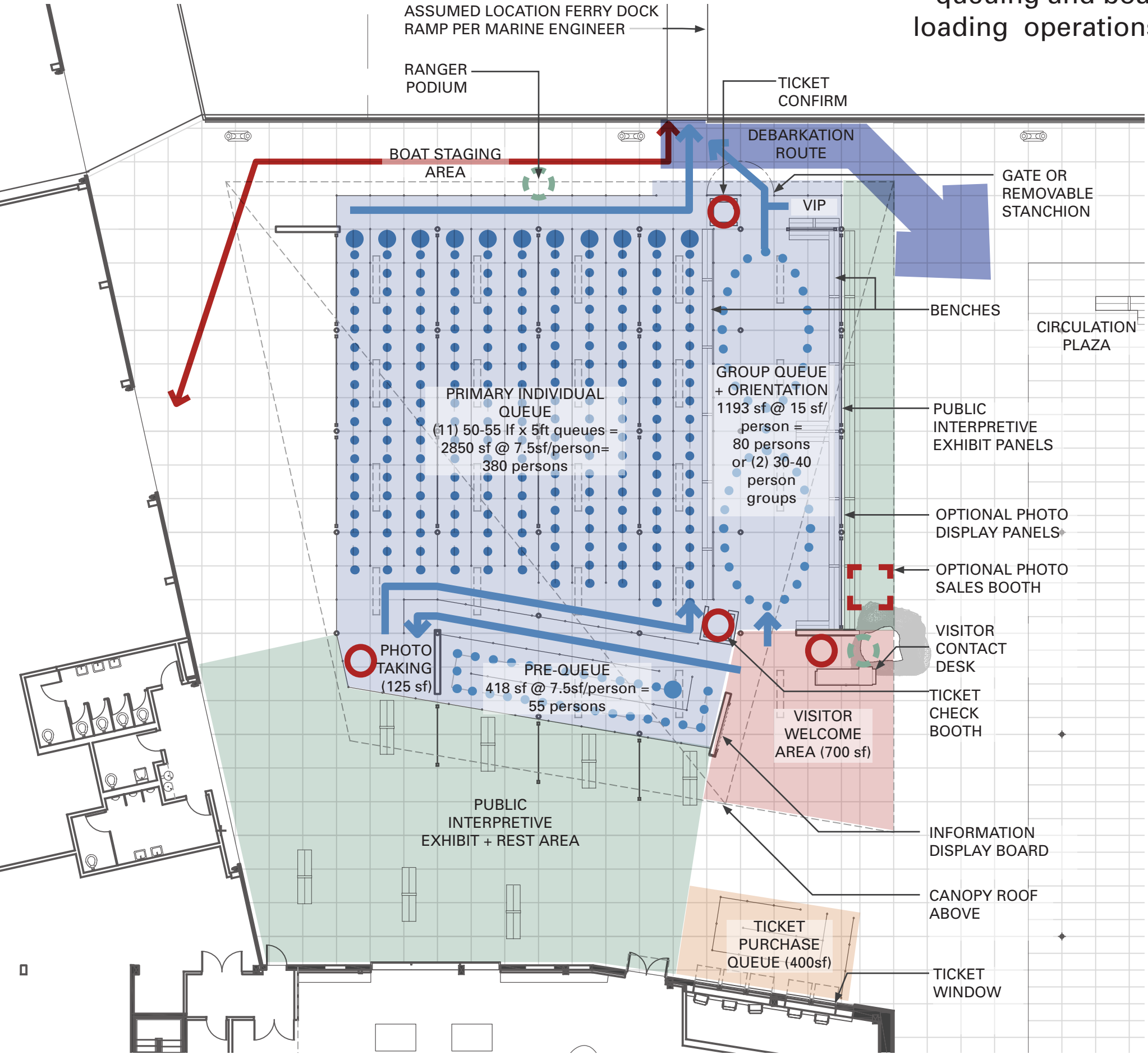
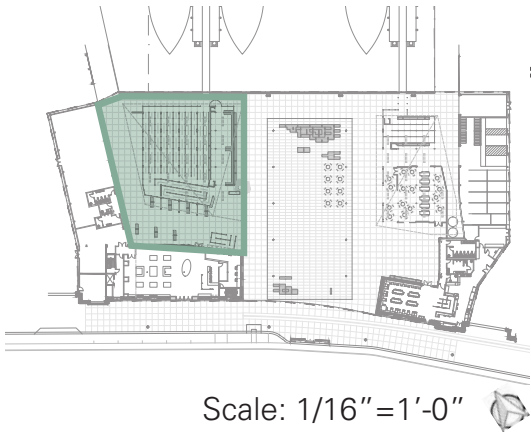
DEBARKATION ROUTE

○

FERRY OPERATOR STAFF POSITION

⊙

OPTIONAL NPS/GGNPC STAFF POSITION



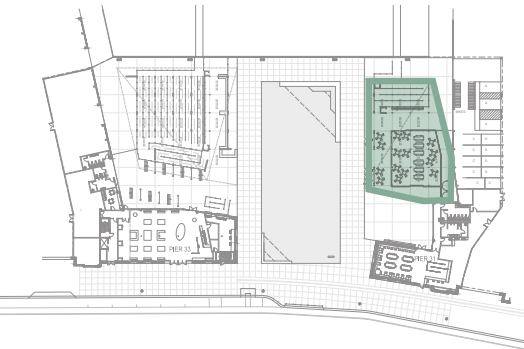
secondary boat and apres tour operations

The Apres Tour canopy is designed to accommodate two primary functions. Most of the space is designed to serve passengers disembarking from Alcatraz and looking for a place to eat, as well as those waiting to embark on a later boat, and visitors to the café looking for additional or outdoor seating. The canopy provides for both 'weather protected' and 'covered' seats. The current configuration would accommodate between 90-100 weather protected seats.

The north end of the canopy contains the queuing for the occasional additional boat service, currently planned for Fort Baker and a sightseeing tour boat. The current queuing configuration accommodates between 70-85 people. Because the frequency of the boats is much less additional capacity can be accommodated through operations (early boat loading) or temporary stanchions could continue north and south of the more fixed queue. Alternately all of these stanchions could be made more temporary allowing the area to accommodate

additional seating when not in use by the boat. This area is separated from the seating area to the south by a required 15' wide egress path from the pier apron.

This canopy also provides a covered area for people to wait for group members using the restrooms and extends south far enough to provide covered access from the café/restrooms to the canopy area in inclement weather. The area between the canopy and the pier shed is intended as storage both for cisterns capturing rainwater off the canopy, for the photo and/or food and coffee carts and possibly additional staff bike parking. This area would be secured by a fence at the north end.



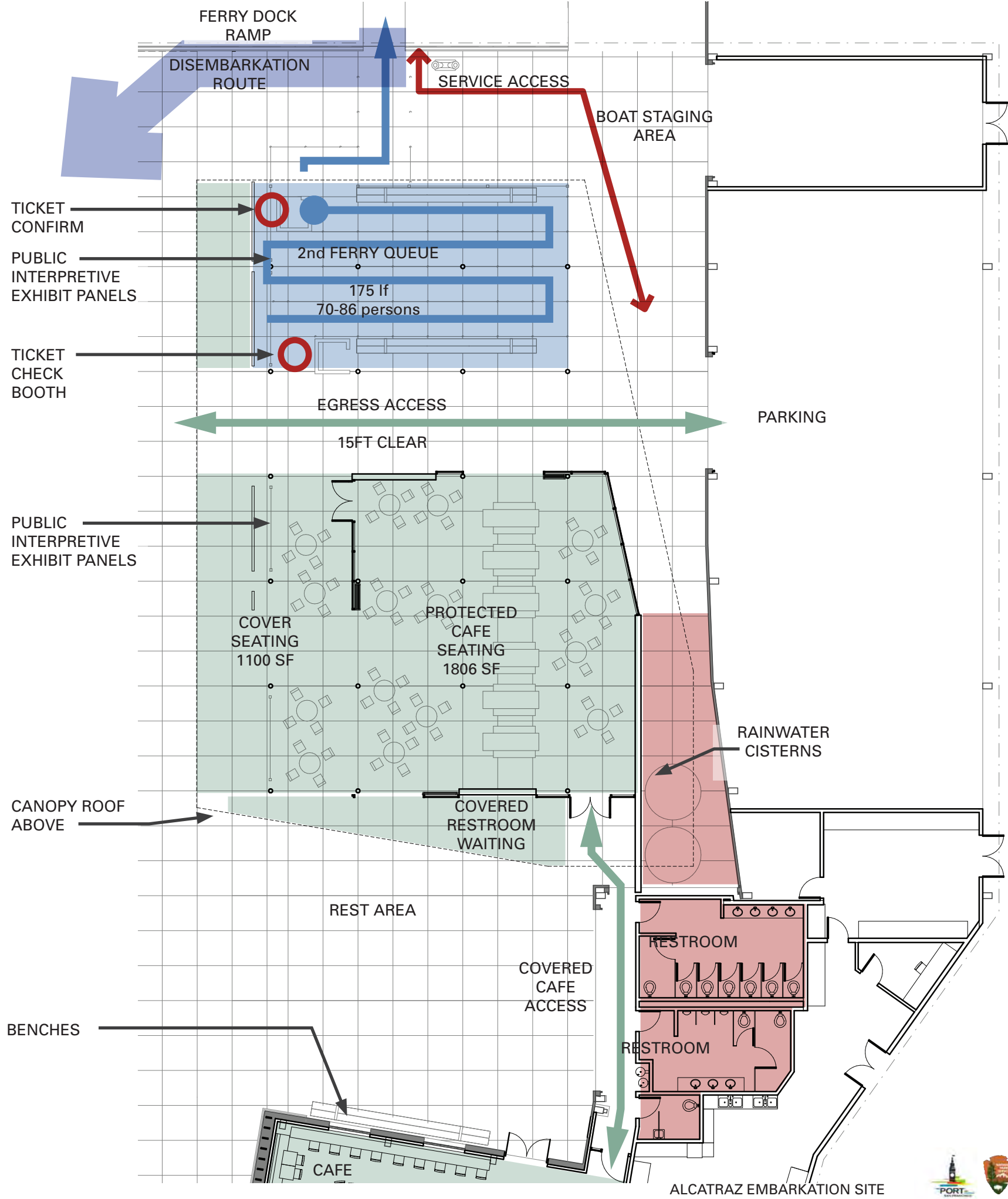
LEGEND

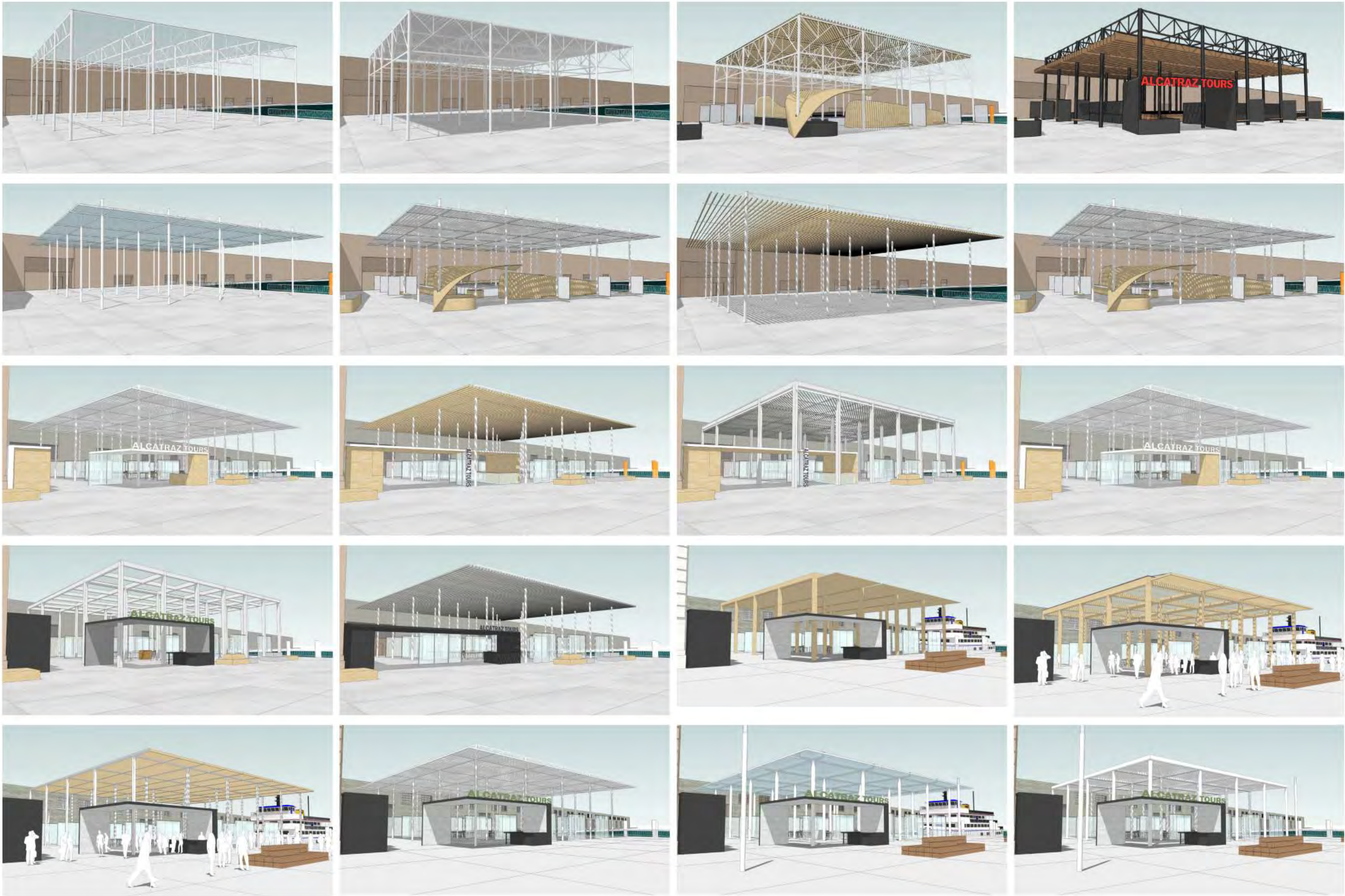
QUEUE CIRCULATION ROUTE

SERVICE ACCESS

DISEMBARKATION ROUTE

FERRY OPERATOR STAFF POSITION







= ZERO CARBON

Following a sustainability charrette with the client group we identified two big goals for sustainability at the Alcatraz Embarkation site. The first is to create a fully carbon neutral Alcatraz operation. This goal is in keeping with both the GGNRA’s goal of becoming a carbon neutral park by 2020 and the Port’s Strategic Plan goal #5 of 100% renewable energy operations and evaluating ‘carbon neutrality’ by 2017. A large Power Purchase Agreement (PPA) on the roof of Pier 31 or Pier 33, or a combination, coupled with efficiency measures could produce enough power to offset energy use on Alcatraz and the boats to and from. Alcatraz is already offsetting nearly half their energy use, and the current ferry operator offsets the carbon of the ferries. More data would be needed to accurately size the PV but initial estimates indicate the potential is there.

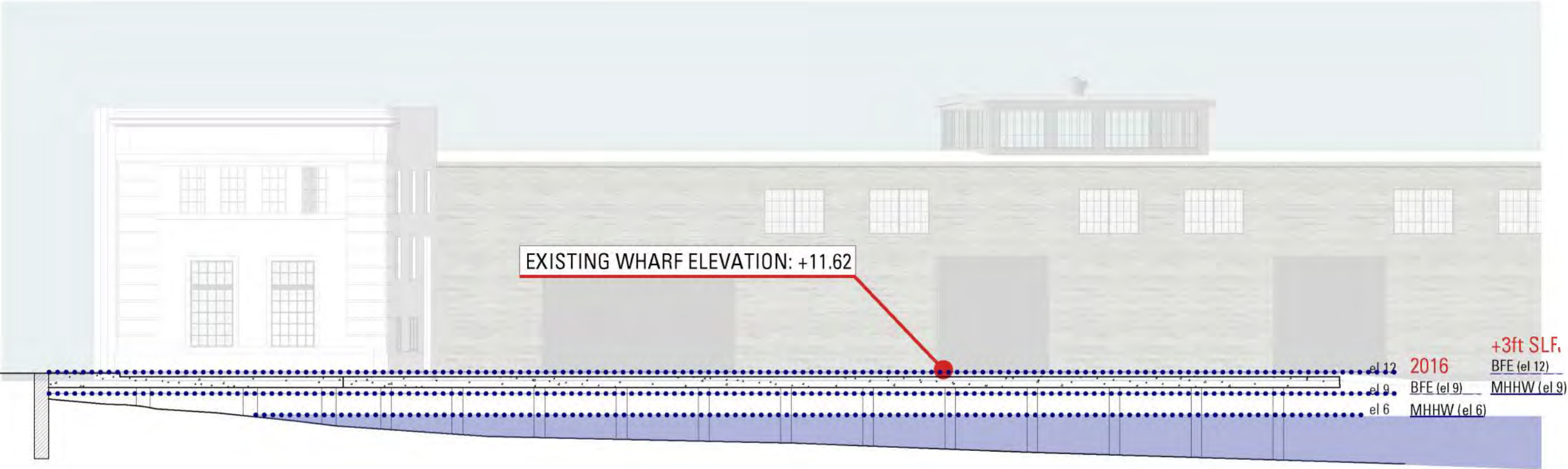
A second goal is to create a site that is resilient to rising sea levels. This involves not only planning for sea level rise, but designing a site that can withstand surge and flood events and recover quickly without major damage or a stop in operations.

Lastly, the site will respond to the three strategies laid out in the GGNRA Climate Action Plan: Adaption, Mitigation, and most importantly Education, using the interpretive areas to help tell the story of our changing climate and its impact on the port, the park and the prison.

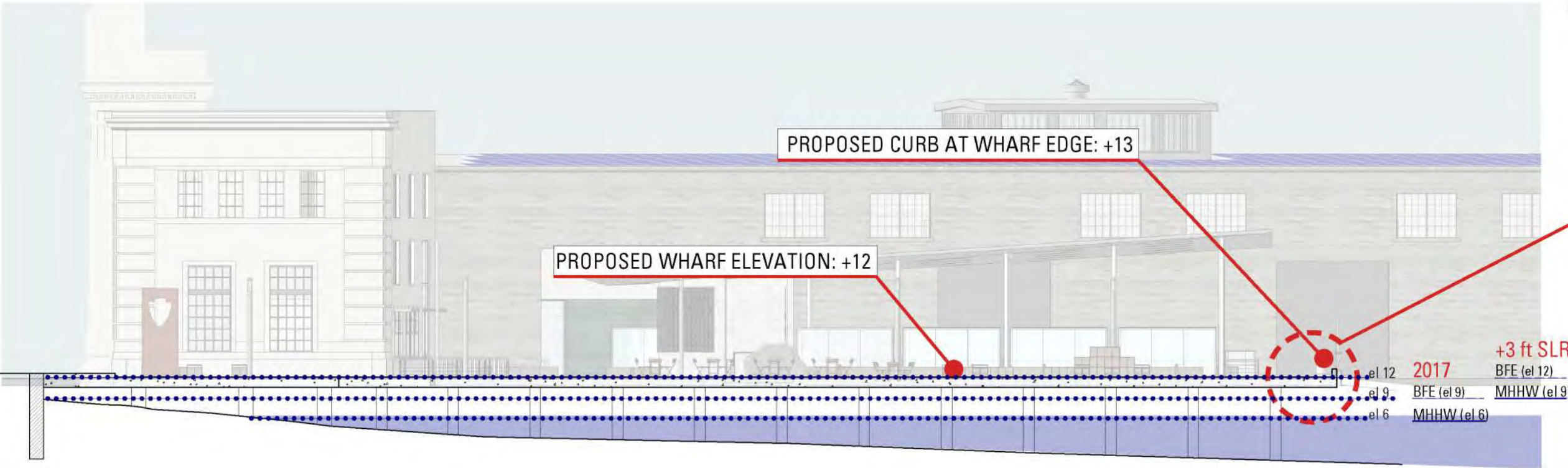
Sustainability Goals:

- 1. Carbon Neutrality for the Entire Alcatraz Operation.
- 2. A Site that is Resilient to Rising Sea Levels.

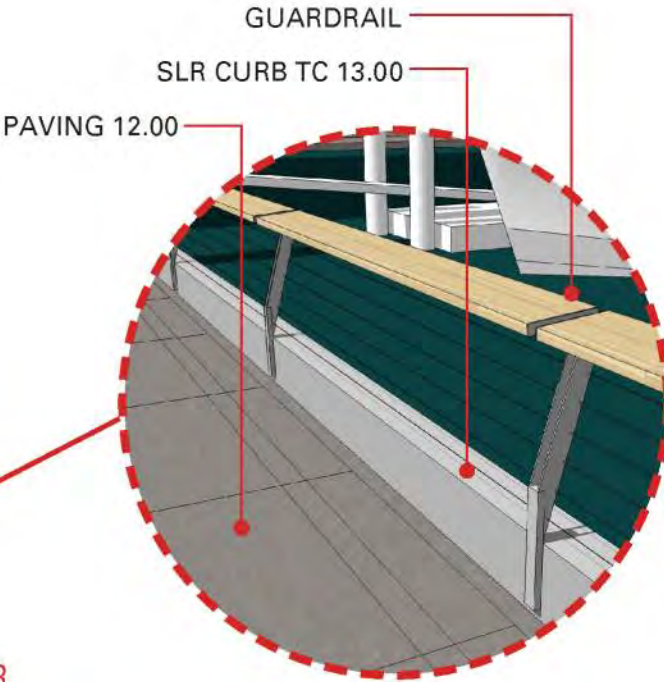
Adaptation of the site for projected sea level rise includes the construction of a cast in place concrete curb along the bay front facing edge of the marginal wharf to an elevatio of 13.00 NAVD88. This measure is intended to mitigate 100 year flood events in addition to 3 feet of sea level rise as is projected to occur over the 50 year lifespan of the project.



EXISTING SITE SECTION AND SLR PROJECTION ELEVATIONS



PROPOSED SITE SECTION AND SLR PROJECTION ELEVATIONS

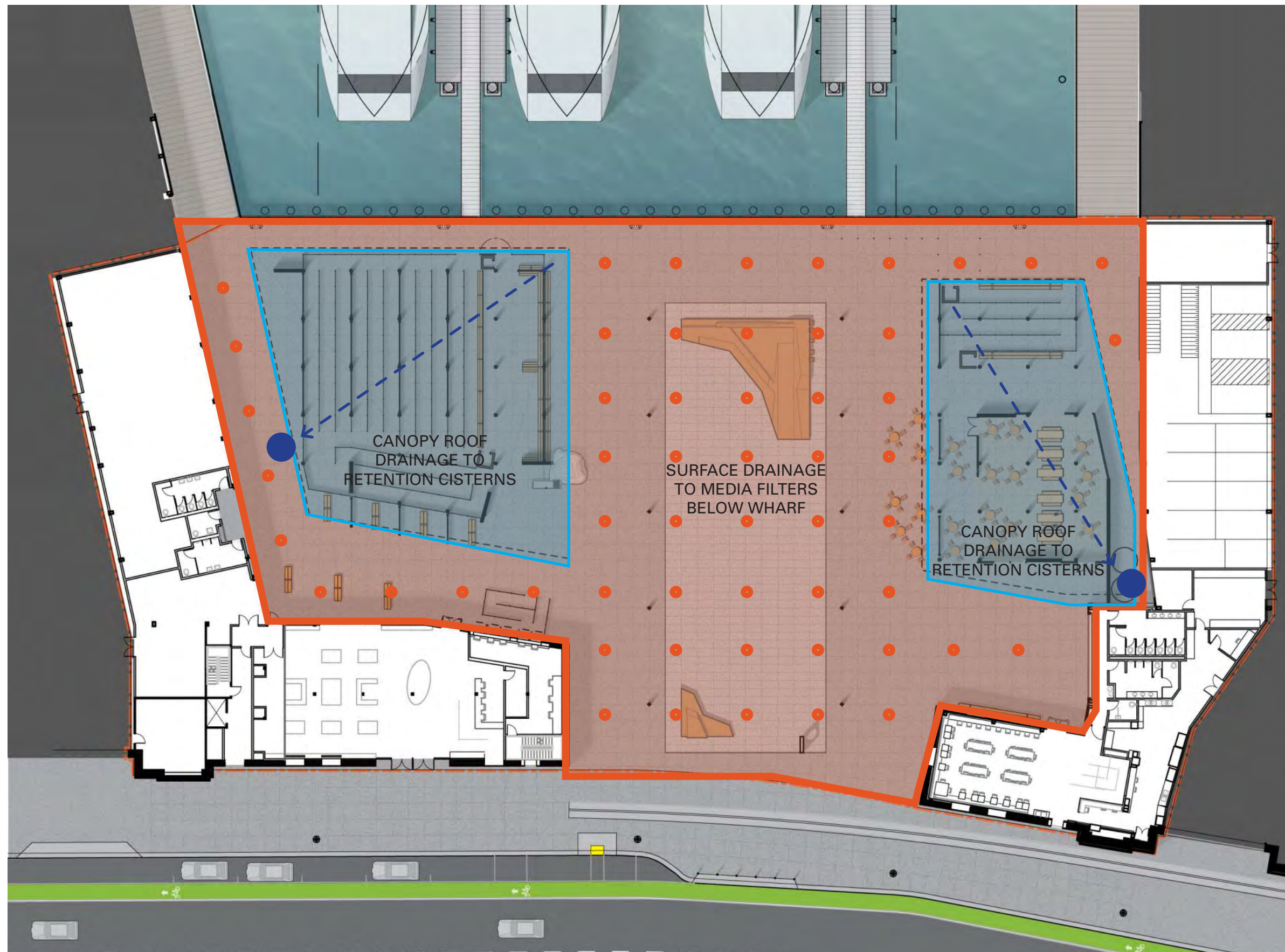


Stormwater Management Strategy

Canopy Roof Drainage to be collected in stormwater retention cisterns, subjected to pre-treatment and discharged to storm drain system



Hardscape Surface Drainage to be routed into in line media filter for treatment prior to discharge to storm drain system or bay



1. carbon neutrality for the entire alcatraz operation.

Sustainability

SUSTAINABILITY OBJECTIVES:

1. Enhance the Port's Climate Action Plan to meet the City's Climate Goals by implementing policies to:
 - a. Achieve zero waste in operations and construction throughout the Port by 2020;
 - b. Have 50% of trips made by clean transportation for Port operations;
 - c. Convert the Port operations to 100% renewable energy through alternative generation, efficiency upgrades, operations, and power purchase; and
 - d. Protect the Bay's ecology and other natural environment through sensitive development of open spaces, stormwater management, and management practices.
2. Implement leasing and development policies that support the City's climate goals and protect the Bay's ecology and surrounding natural environment.
3. Employ best environmental practices in Port operations such as green building, fleet management, and other operations.
4. Minimize carbon emissions and maximize carbon capture for Port operations, tenants, and developers.
5. Evaluate 'carbon neutrality' as a climate action goal for Port operations by 2017.



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[NPS.gov](#) / [Park Home](#) / [Learn About the Park](#) / [Nature](#) / [Environmental Factors](#) / [Climate Change](#) / [Becoming a Carbon Neutral Park](#)

Becoming a Carbon Neutral Park

Golden Gate is making an effort along with other parks in the Pacific West Region to achieve carbon neutral park operations by 2020.

A carbon neutral park would generate no greenhouse gas emissions from its own operations, those of its partners and concessionaires, and eventually its visitors. Achieving this goal requires a major rethinking of park operations, as well as the advancement of new technologies.

Golden Gate participated in a component of the National Park Service's response to climate change, the Climate Friendly Parks program. It helps parks understand their greenhouse gas sources and determine ways to reduce them. Learn more about how the park is reducing its impact on the environment and becoming more sustainable.

Learn more about the [Alcatraz Island park site](#) where we are using a number of sustainable practices to reduce our environmental footprint.



Solar panels on park headquarters building.

NPS photo